

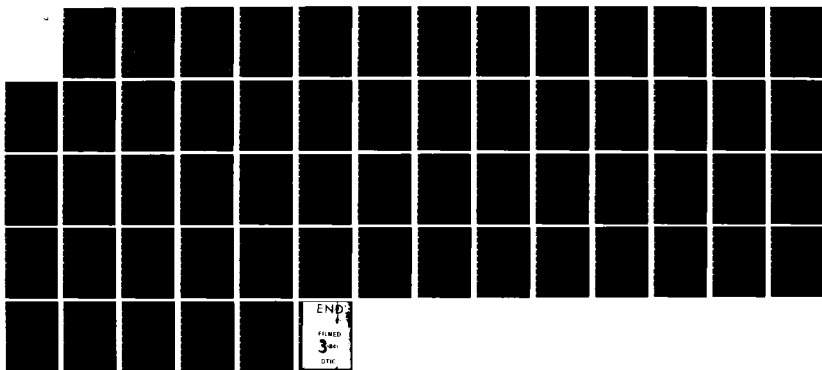
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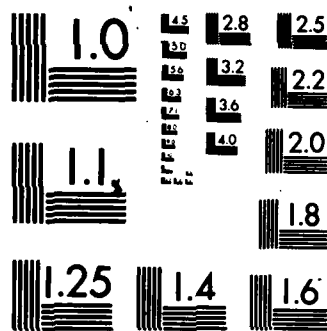
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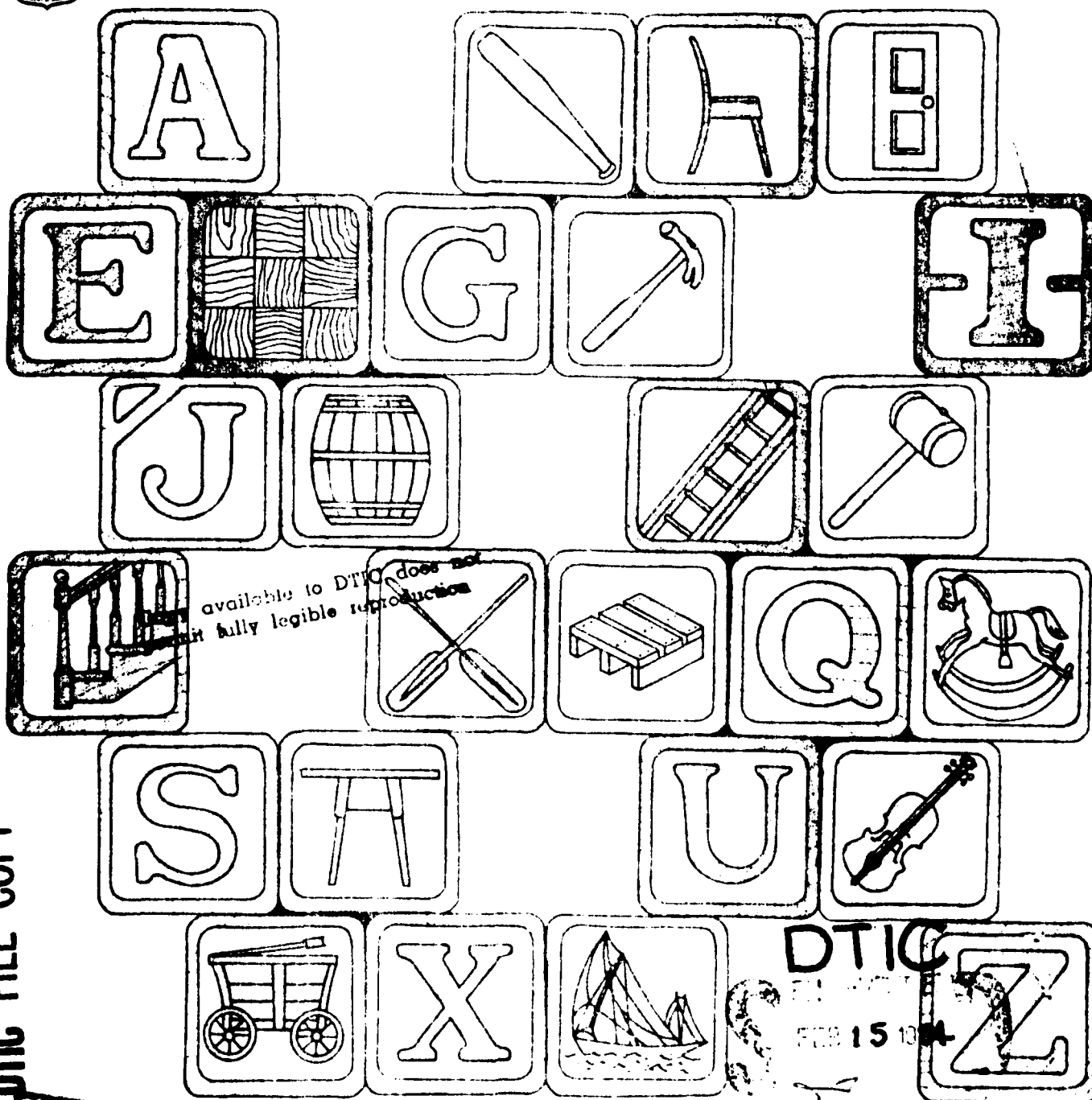
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Wood Used In U.S. Manufacturing Industries, 1977

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Abstract

This study was based on a survey of wood products used by manufacturers in 1977. It found that manufacturers consumed 16.4 billion board feet of lumber, 0.9 billion board feet of logs and bolts, 4.1 billion square feet (3/8-in. basis) of plywood and veneer, 2.1 billion square feet (1/8-in. basis) of hardboard, 0.7 billion square feet (1/2-in. basis) of insulation board, and 3.4 billion square feet (3/4-in. basis) of particleboard and medium-density fiberboard (table 1). This was equivalent to nearly 22.1 billion square feet (1-in. basis) of lumber and wood products. Most of the wood consumed in manufacturing was used in products made for sale, but sizable quantities were also used in products made by the establishment for use during the manufacturing process and for packaging and shipping.

Acknowledgments

The authors and the Forest Service acknowledge the owners and operators of the manufacturing establishments who provided the basic data essential to this study. Their cooperation is greatly appreciated.

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United States
Department of
Agriculture

Forest Service

Forest
Products
Laboratory¹

Resource
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FPL-12

December 1983

Wood Used In U.S. Manufacturing Industries, 1977

By

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¹ Maintained at Madison, Wis., in cooperation with the University of Wisconsin

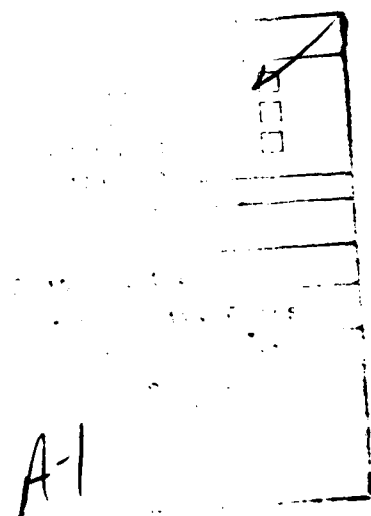


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Introduction

This report provides 1977 estimates of all uses of wood—lumber, logs and bolts, plywood and veneer, hardboard, insulation board, particleboard, and medium-density fiberboard—in all phases of manufacturing. Changing trends and patterns are examined. Included are the quantities of wood products used for materials handling (pallets and skids), packaging, shipping (dunnage, blocking, and bracing), and the making of jigs, models, patterns, and flasks used in the manufacturing process, as well as the actual quantities of wood in the final product itself.

The Congress of the United States and others interested in the wise administration, management, and use of the Nation's forest resource have long recognized the need for analyses of wood use in manufacturing. The McSweeney-McNary Act of 1928 directed the Secretary of Agriculture to ascertain the current consumption of and future requirements for forest products, and to conduct a comprehensive survey of the forest resources of the United States. The Renewable Resources Planning Act of 1974 as amended by the National Forest Management Act of 1976 directed the Secretary of Agriculture to prepare an analysis of present and anticipated uses, demand for, and supply of the renewable resources of forest, range, and other associated lands. This survey is the seventh in a series of periodic studies conducted by the Forest Service designed to partially fulfill the requirements of these Acts. (Survey procedure and results are presented in Apps. A and B.) Previous surveys were conducted in 1928, 1933, 1940, 1948, 1960, and 1965 (3,4,6,7,9,10).²

The 1977 Wood Used in Manufacturing Survey differs from previous surveys in that it covered 59 industries that were estimated to consume 90 percent of the total volume of wood used in all manufacturing. The 1965 survey covered 127 selected industries that consumed approximately 95 percent of total wood used. The 1960 survey covered 423 out of 425 manufacturing industries. Surveys prior to 1960 included those industries considered to be the more important wood users. (See App. C for a more detailed discussion of previous surveys.)

² Italicized numbers in parentheses refer to literature cited at the end of this report.

Wood Used

The manufacturing industries in the United States consume large amounts of lumber and wood products. In 1977 they used an estimated 22.1 billion square feet (1-in. basis) of lumber and other wood products (table 1, fig. 1).³ This includes wood used in products made for sale and that used in the manufacturing process for jigs, models, patterns, and flasks, and for packaging and shipping. Lumber was the product used in greatest amounts. The 16.4 billion square feet (1-in. basis) of lumber consumed was nearly 75 percent of total wood use (table 1, fig. 2). Particleboard ranked second in wood products consumed in manufacturing followed by plywood, bolts, veneer, medium-density fiberboard, insulation board, and hardboard.

Wood use is highly concentrated in a few manufacturing industries. Six industries consumed over 12 billion square feet (1-in. basis) of wood and wood products in 1977, accounting for 54 percent of total consumption (table 2, fig. 3). These industries were millwork, structural wood members not elsewhere classified, wood pallets and skids, mobile homes, wood products not elsewhere classified, and wood household furniture, except upholstered. Millwork and pallets were the two single largest users at 13 and 12 percent, respectively.

Trends in wood use over time are difficult to identify because strict comparisons by industry between 1965 and 1977 are not possible due to many significant definition changes in the Standard Industrial Classification System in 1972 (8) (see App. D for details of these and other changes). In 1965, wood pallets and skids were included in wood products not elsewhere classified, mobile homes were included in trailer coaches, housing type, and structural wood members not elsewhere classified were included in prefabricated wooden buildings and structural members. However, with the exception of hardwood dimension and flooring, the top wood-using industries in 1965 were still the top in 1977.

The principal use of wood in manufacturing in 1977 was for products made for sale. End products accounted for 21.1 of the 22.1 billion square feet of wood used (table 3). The remaining 0.9 billion square feet was used in pallets, containers, jigs, models, patterns, and flasks made and used at a particular establishment and for dunnage, blocking, and bracing. Wood consumption for such uses declined dramatically since 1965. This can be attributed in part to increasing use of purchased products, a shift from wood to other materials for packaging and shipping, and changing technologies eliminating the need for some products.

³ In order to facilitate comparisons of total wood products use between years and industries, 1 board foot of lumber and bolts has been assumed to equal 1 square foot, 1-inch basis.

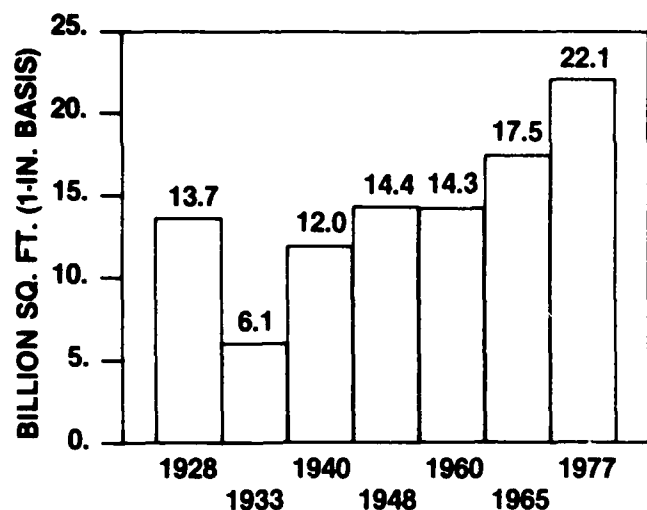


Figure 1.—Trends in total wood products consumption in manufacturing. (M152068)

In 1977, manufacturers purchased large amounts of processed wood parts and products (i.e. furniture frames, pallets, cut-to-size plywood, etc.). Such purchases by the 59 industries included in this survey totaled nearly \$2.0 billion (table 4). Over half of these purchases (55 pct) were for dimension, cut stock, and fabricated parts. No other product accounted for more than 10 percent of total purchases. All manufacturing industries purchased an estimated total of \$2.5 billion. The millwork industry purchased \$363 million of wood products and parts in 1977 (table 5). This is the highest level of purchases of any industry, accounting for 18 percent of total purchases made by the sampled industries. The nonupholstered wood household furniture industry was second with purchases of \$292 million. Seven industries accounted for over half the wood parts and products purchased in 1977.

Large variations exist in the amounts of wood used per \$1,000 of value of shipments in the manufacturing industries in 1977 (table 6). Lumber use was less than 1.0 board foot per \$1,000 of value of shipments for several industries, such as household refrigerators and freezers, and in excess of 3.5 thousand board feet for wood pallets and skids. The six industries using the largest volumes of wood per \$1,000 of value of shipments are reported in table 6.

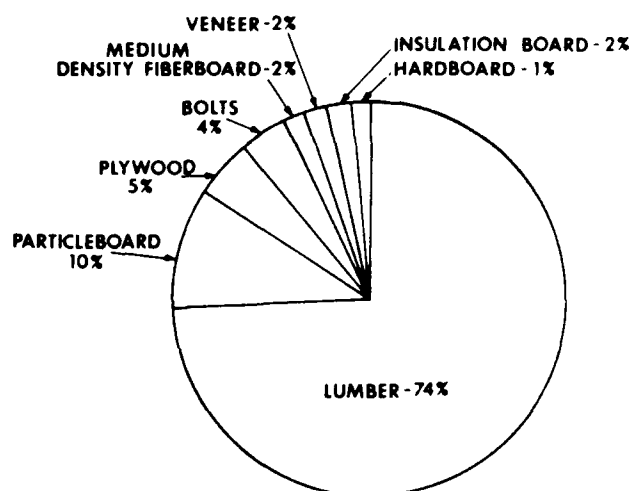


Figure 2.—Wood products used in manufacturing industries, by form of wood, 1977. (M152069)

Lumber

Manufacturing industries in the United States consume large amounts of lumber—16.4 billion board feet in 1977 (table 7).⁴ This was the highest level of consumption ever recorded. Lumber consumption traditionally follows the trend in total U.S. lumber consumption, using approximately one-third of the total.

Over half of all lumber consumed in 1977 was by five industries—millwork, structural wood members not elsewhere classified, wood pallets and skids, wood products not elsewhere classified, and wood household furniture, except upholstered. They consumed 9.2 billion board feet or 56 percent of the lumber used in manufacturing (table 8, fig. 4). This is an 11 percent increase over the 1965 level of 8.3 billion board feet; however, consumption declined in the wood products not elsewhere classified and wood household furniture industries between 1965 and 1977. This was not due to declining use but to changes made in industry definitions in 1972. Wood pallets and skids were removed from the wood products not elsewhere classified industry as were wood kitchen cabinets and wood television and radio cabinets (App. D).

In 1977, 62 percent more softwood lumber was used than hardwood lumber (10.2 compared to 6.2 billion board feet) (table 9). This volume is 28 percent higher than the 1965 volume of 7.3 billion board feet.

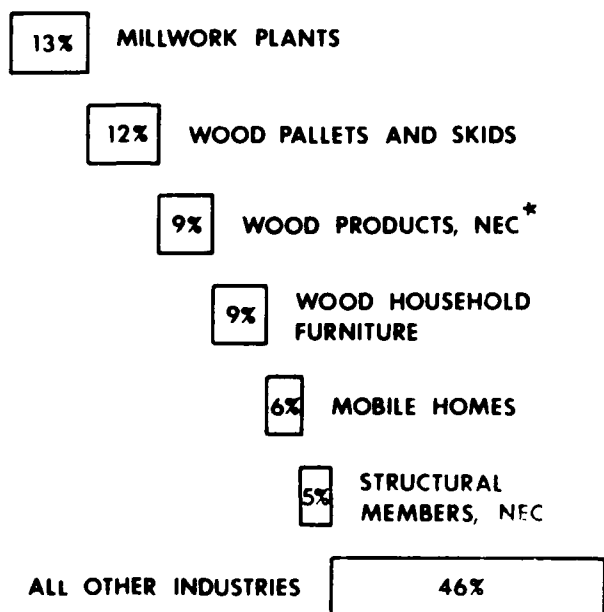
⁴ Does not include wood sold as lumber, flooring, ceiling, siding, or paneling.

The millwork industry was by far the single largest user of softwood lumber in 1977 using over 2.0 billion board feet (table 10). The next largest consuming industries were the structural wood members and the wood products not elsewhere classified industries, each using 1.1 billion board feet of softwood lumber. All other industries used less than a billion board feet each.

Hardwood lumber consumption dropped between 1965 and 1977 by over a half billion board feet, from 7.0 to 6.2 billion board feet. This reduction was due in part to the substitution of other wood and nonwood products for increasingly expensive hardwood lumber. This followed the trend in hardwood lumber production between these years. In 1965, 7.5 billion board feet of hardwood lumber were produced while in 1977 only 6.7 billion board feet (11).

The wood pallets and skids industry used nearly 1.8 billion board feet of hardwood lumber in 1977. This is nearly two and a half times as much hardwood lumber as was used by the wood household furniture, except upholstered, industry, the second largest consumer of hardwood lumber.

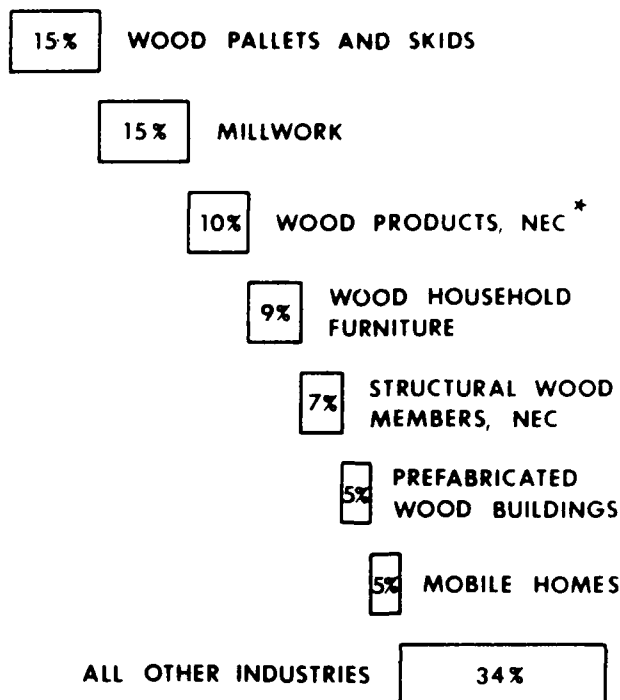
**TOTAL WOOD PRODUCTS USE
22.1 BILLION SQUARE FEET, 1-INCH BASIS**



*NOT ELSEWHERE CLASSIFIED

Figure 3.—Consumption of wood products in manufacturing industries, by industry, 1977. (M152070)

TOTAL LUMBER USE—16.4 BILLION BOARD FEET



*NOT ELSEWHERE CLASSIFIED

Figure 4.—Lumber used in manufacturing industries, by industry, 1977. (M152071)

Nearly all lumber used in 1977 was in products made for sale. This was nearly 15.6 billion board feet or 95 percent of the total volume consumed by all manufacturing industries (table 11). Of the remaining 850 million board feet, nearly half was used for pallets (made for own use) and nearly a quarter each used for containers and for dunnage. Only 10 million board feet were used for ligs, models, patterns, and flasks, an 84 percent decrease from the 1965 level. Overall, lumber use in products made for sale increased by 32 percent over the 1965 level and decreased 66 percent in products made for own use.

Bolts

The use of bolts by the U.S. manufacturing industries totaled 916 million board feet in 1977 (table 12).⁵ This was a 26 percent decrease from the 1965 level of 1,242 million board feet.

⁵ Bolts include short logs (6 ft or less) converted directly into shingles, cooperage stock, dimension stock, blocks, blanks, or excelsior. Does not include logs used for manufacture of pulp or veneer.

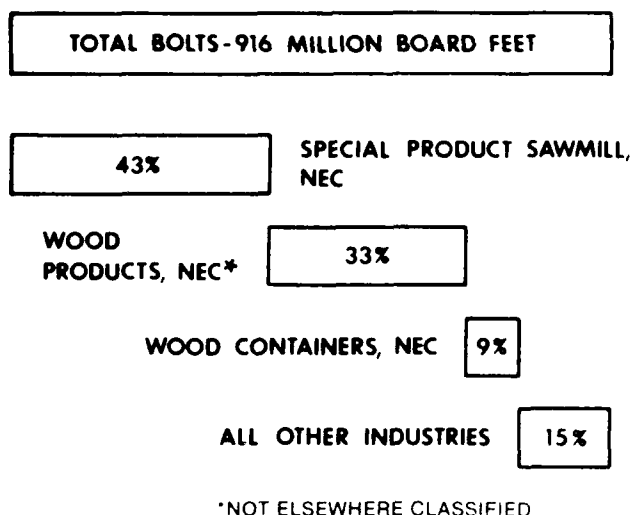


Figure 5.—Bolts used in manufacturing industries, by industry, 1977. (M152072)

The four principal using industries consumed 798 million board feet of bolts (87 pct of total bolt consumption) (table 12, fig. 5). Special products sawmills were the single largest using industry using 395 million board feet in 1977. This is, however, a 14 percent reduction from the 1965 level. The wood products not elsewhere classified industry was the second largest using industry at 301 million board feet, an increase of 17 percent from 1965. The wood containers not elsewhere classified and sporting and athletic goods not elsewhere classified industries used 81 and 21 million board feet of bolts, respectively. All other industries used the remaining 118 million board feet.

In 1977, manufacturers consumed nearly 529 million board feet (58 pct of total use) of hardwood bolts and 387 million board feet (42 pct) of softwood bolts (table 13). This represents a change from 1965 when 68 percent of total use was hardwoods and 32 percent softwoods.

Special product sawmills not elsewhere classified consumed 250 million board feet of softwood bolts in 1977, over half the total softwood bolt consumption during the year (table 14). The wood products not elsewhere classified industry used the largest volume of hardwood bolts, 210 million board feet of all manufacturing industries. Overall, the four principal using industries accounted for 87 percent* of total bolt consumption by manufacturing industries in 1977.

Bolts were used only in products made for sale in 1977.

* Does not include plywood sold as standard-size sheets or wall panels

* Includes veneer used to cover hollow or solid core stock for doors, furniture, kitchen cabinets, etc. Does not include veneer used in making standard-size plywood panels or sold as stock veneer.

Plywood

In 1977, manufacturers used nearly 3 billion square feet (3/8-in. basis) of plywood (table 15).⁶ This was 37 percent more than was used in 1965 and represented 14 percent of total U.S. plywood consumption. Although the volume of plywood used by manufacturing industries increased, the proportion of total U.S. consumption remained at the 1965 level.

Most of the plywood consumed in manufacturing in the United States is softwood. In 1977, 1,798 million square feet (60 pct) was softwood; 1,189 million square feet was hardwood (table 16). The ratio of hardwood to softwood has changed little since 1960.

Half of the plywood use was concentrated in six industries (table 17, fig. 6). The mobile home industry was by far the largest user of plywood, consuming 529 million square feet or 18 percent of the total. The millwork and wood partitions and fixtures industries consumed 8 percent each with 234 and 224 million square feet, respectively. Wood kitchen cabinets, boatbuilding and repairing, wood household furniture, except upholstered, travel trailers and campers, and metal partitions and fixtures together used about one-fourth of the total. All other industries used the remaining 42 percent in varying amounts.

The largest users of hardwood plywood in 1977 were the mobile home, millwork, wood kitchen cabinets, and wood household furniture industries (table 18). Together these four industries accounted for about two-thirds of the total hardwood plywood used. The largest users of softwood plywood were wood partitions and fixtures, mobile homes, boatbuilding and repairing, and metal partitions and fixtures industries. These four accounted for a third of the total softwood plywood used in manufacturing.

Virtually all plywood consumed in 1977 was used in products made for sale (table 19). Manufacturers used only 50 million square feet in products made for own use. Of this, about half was used for pallets and a fourth for containers.

Veneer

In 1977, manufacturers used about 1.1 billion square feet (3/8-in. basis) of veneer (table 20, fig. 7).⁷ This was about 18 percent above the 1965 volume of 916 million square feet. Over 28 percent of the veneer used in 1977 was consumed in the millwork industry and 22 percent in the wood household furniture industry. The volume of veneer used in the millwork industry nearly tripled between 1965 and 1977. The volume of veneer used in the wood household furniture industry increased by 60 percent between 1965 and 1977, although its percentage of total veneer used dropped from 25 to 22 percent.

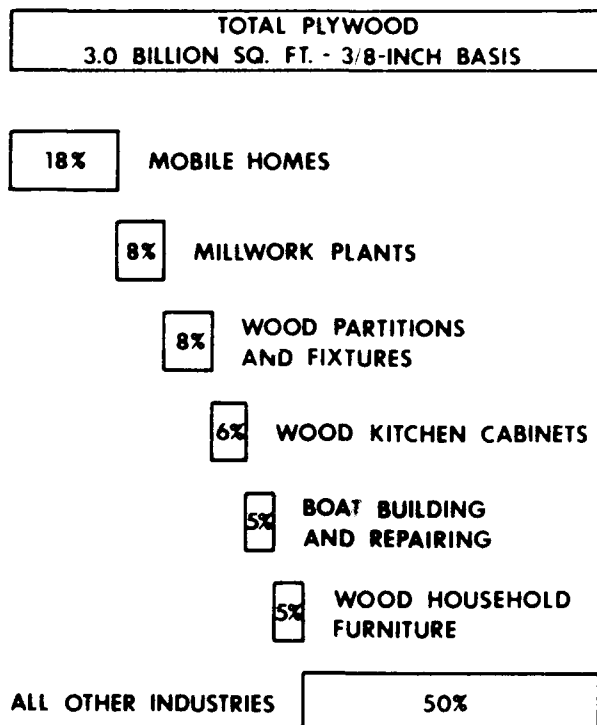


Figure 6.—Plywood used in manufacturing industries, by industry, 1977. (M152073)

Over 756 million square feet (3/8-in. basis) or 70 percent of the veneer used in manufacturing in 1977 was hardwood (table 21). This is a decrease of 93 million square feet from the 1965 level of use. Softwood veneer use increased considerably over the 1965 level, from 58 million square feet to 324 million square feet.

The millwork industry and the wood household furniture except upholstered industry were the two largest users of hardwood veneer in 1977 (table 22). Their combined use of hardwood veneer was over half the total consumption by all manufacturing industries. The millwork industry was by far the single largest user of softwood veneer. Use in 1977 exceeded 100 million square feet, over a third of total softwood veneer use.

Manufacturing industries used approximately 910 million square feet (3/8-in. basis) of veneer in products made for sale and 170 million square feet for products made for own use (table 23).

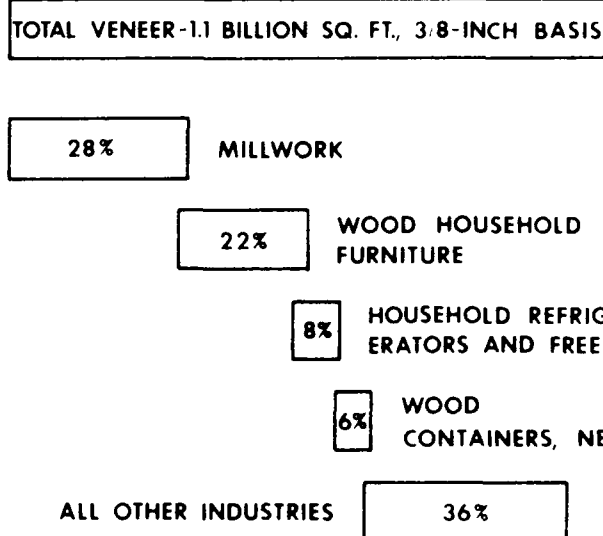
* Includes panels with density of 50 pounds or more per cubic foot. Does not include hardboard made into wall panels.

Hardboard

In 1977, manufacturers used nearly 2.1 billion square feet of hardboard (1/8-in. basis) (table 24).^a This was an increase of 19 percent over 1965.

Six industries accounted for 65 percent of total hardboard use in 1977 (table 24, fig. 8). The millwork industry and the radio and television communication equipment industries used 350 and 351 million square feet (1/8-in. basis) of hardboard respectively, more than any other single industry. Total use by the six principal using industries in 1977 was 3 percent above the use by the six principal using industries in 1965. Use increased 67 percent for the partitions and fixtures industry, while decreasing 50 percent for the wood household furniture industry.

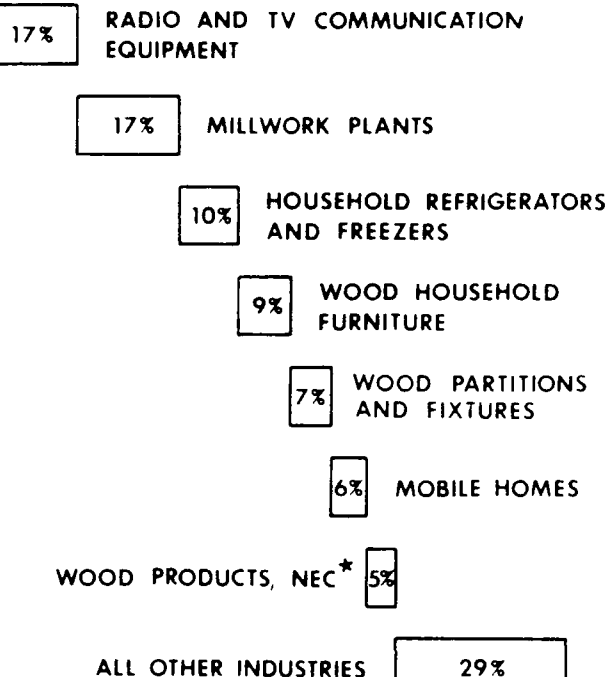
Virtually all the hardboard used for manufacturing in 1977 was used in products made for sale. Packaging and shipping consumed small amounts and jigs, models, patterns, and flasks used negligible amounts.



*NOT ELSEWHERE CLASSIFIED

Figure 7.—Veneer used in manufacturing industries, by industry, 1977. (M152074)

TOTAL HARDBOARD
2.1 BILLION SQ. FT.- 1/8-INCH BASIS



*NOT ELSEWHERE CLASSIFIED

Figure 8 —Hardboard used in manufacturing industries, by industry, 1977. (M152075)

Insulation Board

In 1977, manufacturers used 734 million square feet (1/2-in. basis) of insulation board (table 25).⁹ This represents a threefold increase over the 241 million square feet used in 1965. Essentially all of the 1977 consumption was in products made for sale.

The mobile home industry was the largest consumer of insulation board in 1977, using about 263 million square feet or 36 percent of the total (table 25, fig. 9). The upholstered household furniture and wood partitions and fixtures industries each consumed about one-fourth of the total or 182 and 185 million square feet, respectively. Together these three industries consumed about 86 percent of the total volume of insulation board used in manufacturing.

⁹ Includes panels with density of 26 pounds or less per cubic foot

¹⁰ Includes panels made from chips, flakes, shavings, or similar wood particles

Particleboard

In 1977, manufacturers used 2,932 million square feet (3/4-in. basis) of particleboard, virtually all in products made for sale (table 26).¹⁰ This was over five times the 570 million square feet consumed in 1965. Much of this increase can be attributed to substitution of particleboard for other wood products in the furniture and related industries.

The radio and television communication equipment industry consumed 820 million square feet of particleboard in 1977. This was 28 percent of the total volume of particleboard used in manufacturing and nearly three times that of the next largest user (table 26, fig. 10). The mobile home, wood household furniture, and wood kitchen cabinets industries together consumed one-fourth of the total volume. Millwork, wood partitions and fixtures, and metal partitions and fixtures industries together used about 15 percent, with the remaining 30 percent scattered throughout the other industries surveyed.

Medium-Density Fiberboard

Manufacturers reportedly used an estimated 508 million square feet (3/4-in. basis) of medium-density fiberboard (MDF) in 1977 (table 27). This was a new category, separating a rapidly growing segment of the composition board industry and including panels with a density of more

TOTAL INSULATION BOARD
734 MILLION SQ. FT.-1/2-INCH BASIS

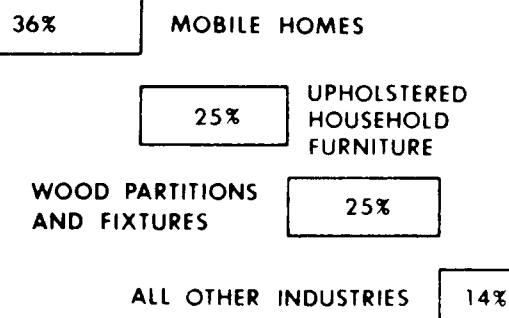


Figure 9 —Insulation board used in manufacturing industries, by industry, 1977 (M152076)

than 26 and less than 50 pounds per cubic foot. Survey respondents were apparently somewhat confused as to what actually constituted MDF. Total U.S. production in 1977 was 441 million square feet, with net foreign trade being negligible (14). Thus, MDF consumption in manufacturing was overestimated by approximately 15 to 20 percent. It is believed that hardboard consumption was inadvertently included with MDF consumption in some questionnaires.

Wood household furniture manufacturers were the largest users of MDF and consumed approximately 206 million square feet or 41 percent of the total volume (table 27, fig. 11). Wood and metal partitions and fixtures together were the second largest users and accounted for about 13 percent of the total or 69 million square feet. Millwork plants and wood kitchen cabinet manufacturers consumed about 6 percent each with the remaining 34 percent scattered throughout the other industries.

**TOTAL PARTICLEBOARD
2.9 BILLION SQ. FT., 3/4-INCH BASIS**

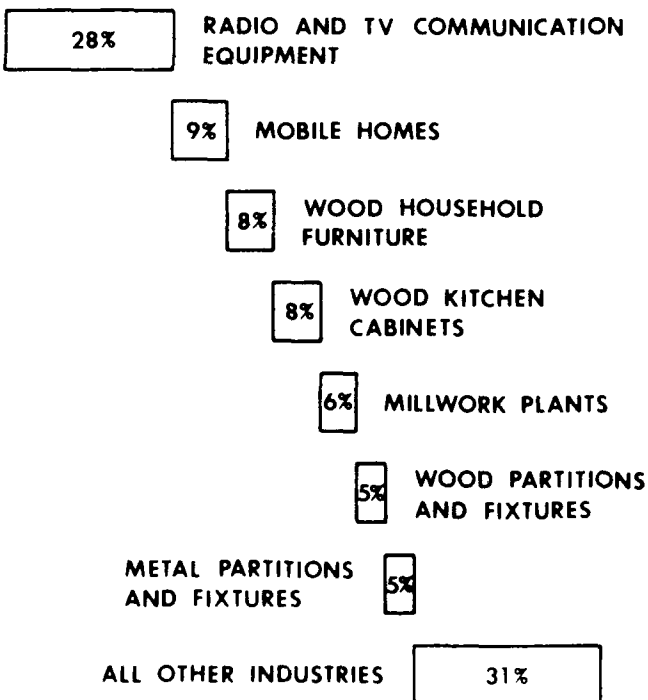


Figure 10.—Particleboard used in manufacturing industries, by industry, 1977. (M152077)

**TOTAL MEDIUM DENSITY FIBERBOARD
508 MILLION SQ. FT.- 3/4-INCH BASIS**

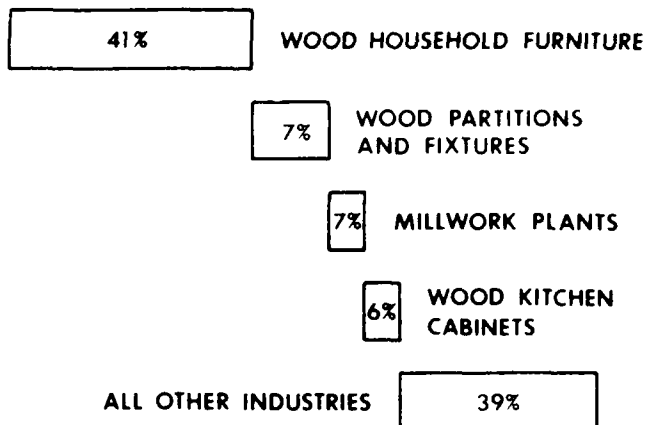


Figure 11.—Medium-density fiberboard used in manufacturing industries, by industry, 1977. (M152078)

Summary and Conclusions

The U.S. manufacturing industries are major consumers of wood products. In 1977 they consumed an estimated 22.1 billion square feet (1-in. basis) of lumber and wood products. Total use increased by nearly 8 billion square feet since 1960.

Lumber has consistently constituted the largest percentage of wood use. In 1977 lumber accounted for nearly 75 percent of the total. This is down from 1960 when lumber was 82 percent of total wood use. The percentage decline is due primarily to the substitution of other wood products, such as plywood, and nonwood products, such as metals and plastics, for lumber.

In the past 20 years, a variety of new board products including hardboard, insulation board, particleboard, and MDF penetrated markets that traditionally belonged to lumber and plywood. Molded particleboard millwork, hardboard-faced doors, and MDF tabletops are examples. The manufacturing industries' rapid acceptance of particleboard is evidenced by phenomenal increase in use—over 400 percent—between 1965 and 1977.

Forecasters predict substitutions and changing market shares as new technologies and products are developed to better utilize the U.S. wood resource. Based on a recent Forest Service study, total wood consumption for manufacturing is expected to double over the next 50 years (11).

The wood-using manufacturing industries in the United States are very concentrated in that for each specific wood product, a handful of industries account for the majority of consumption. For example, five industries used 56 percent of all lumber consumed in manufacturing in 1977. These principal using groups of industries are from Standard Industrial Classification (SIC) Major Group 24—Lumber and Wood Products, except furniture, and Major Group 25—Furniture and Fixtures, as defined by the 1977 SIC Manual (8). New wood products are highly concentrated in a few industries shortly after their introduction. As they gain acceptance and find new uses, the concentration drops and stabilizes. In 1960 for example, the seven principal particleboard-using industries accounted for 85 percent of total use. By 1977 the seven principal using industries accounted for 70 percent of total use. In contrast, the principal lumber-using industries accounted for approximately 55 percent of total use since 1960.

Over the past 17 years, the volume of wood products used in products made for sale as a percent of total wood products consumed in manufacturing has increased. In 1977, nearly 96 percent of all wood products consumed were for products made for sale, up from 85 percent in 1960. The use of wood for pallets, containers, shipping, and for jigs, models, patterns, and flasks made and used by an individual establishment decreased dramatically since 1960. Much of this decrease can be attributed to the increased use of purchased products, a shift to other materials, especially for packaging and shipping, and changing technologies eliminating the use of wood for some products.

Tables

Table 1.—Lumber and wood products used in manufacturing, 1960, 1965, and 1977

Form of wood and unit or measure	Volume			
	1960 ¹	1965 ²	1977	
			Reported ³	Adjusted ⁴
Lumber (million fbm) ⁵	11,743	14,285	14,767	16,408
Bolts (million fbm) ⁵	771	1,242	825	916
Plywood				
(million ft ² , 1-in. basis)	1,058	822	1,008	1,120
(million ft ² , 3/8-in. basis)	2,820	2,192	2,689	2,987
Veneer				
(million ft ² , 1-in. basis)	426	343	365	405
(million ft ² , 3/8-in. basis)	1,136	915	972	1,080
Hardboard				
(million ft ² , 1-in. basis)	152	220	235	262
(million ft ² , 1/8-in. basis)	1,218	1,764	1,884	2,093
Insulation board				
(million ft ² , 1-in. basis)	(⁶)	120	330	367
(million ft ² , 1/2-in. basis)	(⁶)	241	661	734
Particleboard				
(million ft ² , 1-in. basis)	106	428	1,979	2,199
(million ft ² , 3/4-in. basis)	141	570	2,642	2,932
Medium density fiberboard				
(million ft ² , 1-in. basis)	(⁶)	(⁶)	343	381
(million ft ² , 3/4-in. basis)	(⁶)	(⁶)	457	508
Total, all products				
(million ft ² , 1-in. basis)	14,256	17,460	19,852	22,058

¹ Ref. (3).

² Ref. (4).

³ 1977 reported volumes are for the 59 industries included in the sample.

⁴ 1977 adjusted volumes are for all manufacturing industries; that is, the 59 industries in the sample plus estimated volumes for all other manufacturing industries. See Appendix A for sampling and adjustment procedure.

⁵ fbm = ft², 1-in. basis.

⁶ Not included in survey.

Table 2.—Wood used by the six principal wood-using industries, 1977
(Million square feet, 1-in. basis)

SIC ¹ No.	Industry	Total wood used	Lumber ²	Bolts ²	Ply- wood	Veneer	Hard- board	Insu- lation board	Parti- cle- board	Medium- density fiber- board
	Principal wood-using industries									
2431	Millwork	2,615	2,429	—	88	115	44	2	131	25
2439	Structural wood members, not elsewhere classified	1,153	1,153	—	38	—	—	—	1	1
2448	Wood pallets and skids	2,574	2,510	12	41	—	8	—	2	—
2451	Mobile homes	1,398	842	—	198	—	17	132	209	—
2499	Wood products, not elsewhere classified	2,048	1,625	301	35	4	13	—	69	—
2511	Wood household furniture, except upholstered	1,971	1,465	—	54	90	23	—	184	155
	Total, principal wood-using industries	12,019	10,024	313	454	209	105	134	596	181
	All other industries	10,039	6,384	603	666	196	157	233	1,603	200
	Total, all industries	22,058	16,408	916	1,120	405	262	367	2,199	381

¹ SIC = Standard Industrial Classification.

² fbm = ft², 1-inch basis.

Table 3.—Wood used in manufacturing industries, by type of use, 1960, 1965, and 1977
(Million square feet, 1-in. basis)

Type of use	Volume			Percent change 1965-1977
	1960 ¹	1965 ²	1977	
Products made for sale	12,015	14,907	21,117	+42
Products made for own use				
Pallets	706	858	479	-44
Containers	830	748	239	-68
Jigs, models, patterns, and flasks	57	75	13	-83
Dunnage, blocking, and bracing	648	872	210	-76
Total, own use	2,241	2,553	941	-63
Total, all uses	14,256	17,460	22,058	+26

¹ Ref. (3).

² Ref. (4).

Table 4.—Purchases of wood parts and products by manufacturing industries, 1977¹

Part or product	Purchases	
	Million dollars	Percent
Hardwood dimension	396	20
Softwood cut stock	440	22
Hardwood and softwood fully and semifabricated parts	292	15
Furniture frames	84	4
Veneer cut-to-size and parts	120	6
Plywood cut-to-size and parts	174	9
Hardboard cut-to-size and parts	45	2
Particleboard cut-to-size and parts	154	8
Composite panels containing a combination of wood items, or wood and other materials	86	5
Boxes and crates—nailed wood or panel (assembled and unassembled)	82	4
Boxes and crates—wirebound (assembled and unassembled)	6	(²)
Pallets and pallet containers—(assembled and unassembled)	89	5
Veneer containers other than boxes or crates; include baskets, hampers, etc.	(²)	(²)
Cooperage, tight and slack (assembled and unassembled)	1	(²)
Jigs, models, patterns, and flasks	3	(²)
Total	1,972	100

¹ Purchases made by the 59 industries sampled in this survey. Estimated totals for all manufacturing industries was \$2.5 billion in 1977.

² Less than \$500,000 or 0.5 percent.

Table 5.—Purchases of wood parts and products by the seven principal purchasing industries, 1960, 1965, and 1977¹ (Million dollars)

SIC ² No.	Industry	1960 ³	1965 ⁴	1977
	Principal purchasing industries, 1977			
2431	Millwork	72	76	363
2439	Structural wood members, not elsewhere classified	NA ⁵	NA	80
2499	Wood products, not elsewhere classified	18	40	164
2511	Wood household furniture, except upholstered	43	179	292
2512	Upholstered household	36	35	98
3651	Radio and television communications equipment	NA	44	88
3931	Musical instruments	5	11	89
	Total, principal purchasing industries ⁶	238	429	1,174

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definitional changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (3).

⁴ Ref. (4).

⁵ NA = not available.

⁶ Totals for 1960 and 1965 are for the seven principal wood-using industries in those years, not necessarily the seven reported here for 1977.

Table 6.—Wood use per \$1,000 of value of shipments by the six principal wood-using industries, 1977

Form of wood and unit of measure	Industry					
	SIC ¹ No. 2431 Millwork	SIC No. 2439 Structural wood members, not elsewhere classified	SIC No. 2441 Nailed wood boxes and shook	SIC No. 2448 Wood pallets and skids	SIC No. 2449 Wood containers, not elsewhere classified	SIC No. 2499 Wood products, not elsewhere classified
Lumber (fbm)	618.5	1,427.6	1,106.7	3,596.4	666.0	635.5
Bolts (fbm)	.0	.0	9.5	17.5	317.1	117.7
Plywood (ft ² , 3/8-in. basis)	59.6	124.3	116.2	156.0	197.5	36.9
Veneer (ft ² , 3/8-in. basis)	78.1	.1	33.1	.0	264.9	4.2
Hardboard (ft ² , 1/8-in. basis)	89.2	.2	69.6	94.3	10.3	40.0
Insulation board (ft ² , 1/2-in. basis)	1.2	.7	.1	.0	.0	.1
Particleboard (ft ² , 3/4-in. basis)	44.5	.8	10.6	3.9	6.3	35.9
Medium-density fiberboard (ft ² , 3/4-in. basis)	8.5	1.9	5.7	.0	4.2	.2

¹ SIC = Standard Industrial Classification.

Table 7.—Lumber consumption in the United States and use by manufacturing industries, specified years, 1960-1977
(Billion board feet)

Year	U.S. consumption ¹ volume	Used by manufacturing industries	
		Volume	Percent
1960	36.0	11.7	32
1965	41.1	14.3	35
1977	46.9	16.4	35

¹ Refs. (5) and (14).

Table 8.—Lumber used by the five principal using industries, 1960, 1965, and 1977¹
(Million board feet)

SIC ² No.	Industry	1960 ³	1965 ⁴	1977	Percent change 1965-1977
	Principal lumber-using industries, 1977				
2431	Millwork	1,557	2,012	2,429	
2439	Structural wood members not elsewhere classified	NA ⁵	NA	1,153	
2448	Wood pallets and skids	NA	NA	2,510	
2499	Wood products not elsewhere classified	1,129	1,820	1,625	
2511	Wood household furniture, except upholstered	1,135	1,659	1,465	
	Total, principal lumber-using industries	6,135	8,253	9,182	+11
	All other industries	5,608	6,032	7,226	+20
	Total, all industries	11,743	14,285	16,408	+15

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definitional changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (3).

⁴ Ref. (4).

⁵ NA = not available.

⁶ Totals for 1960 and 1965 are for the five principal wood-using industries in those years, not necessarily the five reported here for 1977.

Table 9.—Hardwood and softwood lumber used in manufacturing industries, 1960, 1965, and 1977

Year	Total volume	Hardwood		Softwood	
		Volume	Percent	Volume	Percent
1960 ¹	11,743	5,721	49	6,022	51
1965 ²	14,285	6,993	49	7,292	51
1977	16,408	6,226	38	10,182	62

¹ Ref. (3).

² Ref. (4).

Table 10.—Hardwood and softwood lumber used by the five principal lumber-using industries, 1977
(Million board feet)

SIC ¹ No.	Industry	Total		Hardwood volume	Softwood volume
		Volume	Percent		
	Principal lumber-using industries				
2431	Millwork	2,429	15	388	2,041
2439	Structural wood members not elsewhere classified	1,153	7	43	1,110
2448	Wood pallets and skids	2,510	15	1,789	721
2499	Wood products not elsewhere classified	1,625	10	514	1,111
2511	Wood household furniture, except upholstered	1,465	9	774	691
	Total, principal lumber-using industries	9,182	56	3,508	5,674
	All other industries	7,226	44	2,718	4,508
	Total, all industries	16,408	100	6,226	10,182

¹ SIC = Standard Industrial Classification.

Table 11.—Lumber used in manufacturing industries, by type of use, 1977
(Million board feet)

Type of use	Volume	Percent of total	Percent of own use
Products made for sale	15,557	95	—
Products made for own use			
Pallets	413	3	48
Containers	232	1	27
Jigs, models, patterns, and flasks	10	(¹)	1
Dunnage, blocking, and bracing	196	1	23
Total, all uses	16,408	100	

¹ Less than 0.5 pct.

Table 12.—Bolts used by the four principal using industries, 1960, 1965, and 1977¹
(Million board feet)

SIC ² No.	Industry	Volume			Percent change 1965-1977
		1960 ³	1965 ⁴	1977	
	Principal bolt-using industries, 1977				
2429	Special product sawmills not elsewhere classified	359	464	395	
2449	Wood containers not elsewhere classified	NA ⁵	NA	81	
2499	Wood products not elsewhere classified	254	256	301	
3949	Sporting and athletic goods not elsewhere classified	NA	NA	21	
	Total, principal bolt-using industries ⁶	704	989	798	-19
	All other industries	67	253	118	-53
	Total, all industries	771	1,242	916	-26

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definitional changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (3).

⁴ Ref. (4).

⁵ NA = not available.

⁶ Totals for 1960 and 1965 are for the four principal wood-using industries in those years, not necessarily the four reported here for 1977.

Table 13.—Hardwood and softwood bolts used by manufacturing industries, 1960, 1965, and 1977
(Million board feet)

Year	Total volume	Hardwood		Softwood	
		Volume	Percent	Volume	Percent
1960 ¹	771	532	69	239	31
1965 ²	1,242	841	68	401	32
1977	916	529	58	387	42

¹ Ref. (3).

² Ref. (4).

Table 14.—Hardwood and softwood bolts used by the four principal using industries, 1977
(Million board feet)

SIC ¹ No.	Industry	Total		Hardwood volume	Softwood volume
		Volume	Percent		
	Principal bolt-using industries				
2429	Special product sawmills not elsewhere classified	395	43	145	250
2449	Wood containers not elsewhere classified	81	9	79	2
2499	Wood products not elsewhere classified	301	33	210	91
3949	Sporting and athletic goods not elsewhere classified	21	2	21	0
	Total, principal bolt-using industries	798	87	455	343
	All other industries	118	13	74	44
	Total, all industries	916	100	529	387

¹ SIC = Standard Industrial Classification.

Table 15.—Plywood consumption in the United States and use by manufacturing industries, 1960, 1965, and 1977
(Million square feet, 3/8-in. basis)

Year	U.S. consumption ¹ volume	Used by manufacturing industries	
		Volume	Percent
1960 ²	9,571	2,820	29
1965 ³	15,492	2,192	14
1977	21,981	2,987	14

¹ Source: U.S. Department of Agriculture (14).

² Ref. (3).

³ Ref. (4).

Table 16.—Hardwood and softwood plywood used by manufacturing industries, 1960, 1965, and 1977
(Million square feet, 3/8-in. basis)

Year	Total volume	Hardwood		Softwood	
		Volume	Percent	Volume	Percent
1960 ¹	2,820	1,061	38	1,759	62
1965 ²	2,192	928	42	1,264	58
1977	2,987	1,189	40	1,798	60

¹ Ref. (3).

² Ref. (4).

Table 17.—Plywood used by the six principal using industries, 1960, 1965, and 1977¹
(Million square feet, 3/8-in. basis)

SIC ² No.	Industry	1960 ³	1965 ⁴	1977	Percent change 1965-1977
	Principal plywood-using industries, 1977				
2431	Millwork	307	273	234	
2434	Wood kitchen cabinets	NA ⁵	NA	186	
2451	Mobile homes	NA	NA	529	
2511	Wood household furniture, except upholstered	450	442	144	
2541	Wood partitions and fixtures	(⁶)	91	224	
3732	Boat building and repairing	(⁶)	1	151	
	Total, principal plywood-using industries ⁷	2,099	1,400	1,468	+ 5
	All other industries	721	792	1,519	- 92
	Total, all industries	2,820	2,192	2,987	+ 36

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definitional changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref (3).

⁴ Ref (4).

⁵ NA = not available.

⁶ Less than 500,000 ft², 3/8-in. basis.

⁷ Totals for 1960 and 1965 are for the six principal wood-using industries in those years, not necessarily the six reported here for 1977.

Table 18.—Hardwood and softwood plywood used by the eight principal using industries, 1977
(Million square feet, 3/8-in. basis)

SIC ¹ No.	Industry	Total		Hardwood	Softwood
		Volume	Percent	volume	volume
	Principal plywood-using industries				
2431	Millwork	234	8	161	73
2434	Wood kitchen cabinets	186	6	137	48
2451	Mobile homes	529	18	355	175
2511	Wood household furniture, except upholstered	144	5	109	35
2541	Wood partitions and fixtures	224	8	43	182
2542	Metal partitions and fixtures	121	4	5	116
3732	Boatbuilding and repairing	151	5	20	132
3792	Travel trailers and campers	124	4	39	85
	Total, principal plywood-using industries	1,713	57	869	846
	All other industries	1,274	43	320	952
	Total, all industries	2,987	100	1,189	1,798

¹ SIC = Standard Industrial Classification.

Table 19.—Plywood used in manufacturing industries, by type of use, 1977
(Million square feet, 3/8-in. basis)

Type of use	Volume	Percent of total	Percent of own use
Products made for sale	2,937	98	—
Products made for own use			
Pallets	24	1	48
Containers	13	(¹)	25
Jigs, models, patterns, and flasks	4	(¹)	8
Dunnage, blocking, and bracing	9	(¹)	18
Total	2,987	100	

¹ Less than 0.5 pct.

Table 20.—Veneer used by the four principal using industries, 1960, 1965, and 1977¹
(Million square feet, 3/8-in. basis)

SIC ² No.	Industry	Volume			Percent change 1965-1977
		1960 ³	1965 ⁴	1977	
	Principal veneer-using industries, 1977				
2431	Millwork	32	87	307	
2449	Wood containers not elsewhere classified	541	348	68	
2511	Wood household furniture, except upholstered	89	151	241	
3632	Household refrigerators and freezers	NA ⁵	NA	85	
	Total, principal veneer-using industries ⁶	903	726	701	-3
	All other industries	233	190	379	+99
	Total, all industries	1,136	916	1,080	+18

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definition changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (3).

⁴ Ref. (4).

⁵ NA = not available.

⁶ Totals for 1960 and 1965 are for the four principal wood-using industries in those years, not necessarily the four reported here for 1977.

Table 21.—Hardwood and softwood veneer used by manufacturing industries, 1960, 1965, and 1977
(Million square feet, 3/8-in. basis)

Year	Total volume	Hardwood		Softwood	
		Volume	Percent	Volume	Percent
1960 ¹	1,134	1,078	95	56	5
1965 ²	907	849	94	58	6
1977	1,080	756	70	324	30

¹ Ref. (3).

² Ref. (4).

Table 22.—Hardwood and softwood veneer used by the four principal using industries, 1977
(Million square feet, 3/8-in. basis)

SIC ¹ No.	Industry	Total		Hardwood volume	Softwood volume
		Volume	Percent		
	Principal veneer-using industries				
2431	Millwork	307	28	188	119
2449	Wood containers not elsewhere classified	68	6	65	3
2511	Wood household furniture, except upholstered	241	22	221	20
3632	Household refrigerators and freezers	85	8	1	84
	Total, principal veneer-using industries	701	64	475	226
	All other industries	379	36	281	98
	Total, all industries	1,080	100	756	324

¹ SIC = Standard Industrial Classification.

Table 23.—Veneer used in manufacturing industries, by type of use, 1977
(Million square feet, 3/8-in. basis)

Type of use	Volume	Percent of total	Percent of own use
Products made for sale	910	85	—
Products made for own use			
Pallets	142	13	83
Containers	5	(¹)	3
Jigs, models, patterns, and flasks	2	(¹)	1
Dunnage, blocking, and bracing	21	2	12
Total	1,080	100	

¹ Less than 0.5 pct.

Table 24.—Hardboard used by the six principal using industries, 1960, 1965, and 1977¹
(Million square feet, 1/8-in. basis)

SIC ² No.	Industry	1960 ³	1965 ⁴	1977	Percent change 1965-1977
	Principal hardboard-using industries, 1977				
2431	Millwork	68	243	350	
2451	Mobile homes	NA ⁵	NA	134	
2511	Wood household furniture, except upholstered				
	Partitions and fixtures	196	368	186	
2541	Household refrigerators and freezers	59	84	140	
3632	Radio and television communication equipment	NA	NA	207	
3651		NA	NA	351	
	Total, principal hardboard-using industries ⁶	442	1,323	1,368	+ 3
	All other industries	776	441	725	+ 64
	Total, all industries	1,218	1,764	2,093	+ 19

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definitional changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (3).

⁴ Ref. (4).

⁵ NA = not available.

⁶ Totals for 1960 and 1965 are for the seven principal wood-using industries in those years, not necessarily the seven reported here for 1977.

Table 25.—Insulation board used by the three principal using industries, 1965 and 1977¹
(Million square feet, 1/2-in. basis)

SIC ² No.	Industry	1965 ³	1977	Percent change 1965-1977
	Principal insulation board-using industries, 1977			
2451	Mobile homes	NA ⁴	263	
2512	Upholstered household furniture	(⁵)	182	
2541	Wood partitions and fixtures	(⁵)	185	
	Total, principal insulation board using industries ⁶	201	630	+ 213
	All other industries	40	104	+ 160
	Total, all industries	241	734	+ 205

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definition changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (4).

⁴ NA = not available.

⁵ Less than 500,000 ft², 1/2-in. basis.

⁶ Totals for 1960 and 1965 are for the three principal wood-using industries in those years, not necessarily the three reported here for 1977.

Table 26.—Particleboard used by the seven principal using industries, 1960, 1965, and 1977¹
(Million square feet, 3/4-in. basis)

SIC ² No.	Industry	1960 ³	1965 ⁴	1977	Percent change 1965-1977
	Principal particleboard- using industries, 1977				
2431	Millwork	9	33	175	
2434	Wood kitchen cabinets	NA ⁵	NA	237	
2451	Mobile homes	NA	NA	278	
2511	Wood household furniture, except upholstered				
		35	196	246	
2541	Wood partitions and fixtures	2	61	154	
2542	Metal partitions and fixtures	(⁶)	1	147	
3651	Radio and television communication equipment	NA	(⁶)	820	
	Total, principal particleboard using industries ⁷	120	477	2,057	+ 331
	All other industries	21	93	875	+ 841
	Total, all industries	141	570	2,932	+ 414

¹ Strict comparisons by industry between 1965 and 1977 may not be possible due to definition changes in the Standard Industrial Classification system in 1972. See Appendix D for specific changes.

² SIC = Standard Industrial Classification.

³ Ref. (3).

⁴ Ref. (4).

⁵ NA = not available.

⁶ Less than 500,000 ft², 3/4-in. basis. ⁷ Totals for 1960 and 1965 are for the seven principal wood-using industries in those years, not necessarily the seven reported here for 1977.

Table 27.—Medium density fiberboard used by the five principal using industries, 1977
(Million square feet, 3/4-in. basis)

SIC ¹ No.	Industry	Volume	Percent of total
	Principal medium density fiberboard- using industries, 1977		
2431	Millwork	33	6
2434	Wood kitchen cabinets	28	6
2511	Wood household furniture, except upholstered	206	41
2541	Wood partitions and fixtures	37	7
2542	Metal partitions and fixtures	32	6
	Total, principal medium density fiberboard-using industries	336	66
	All other industries	172	34
	Total, all industries	508	100

¹ SIC = Standard Industrial Classification.

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Appendix A— Procedure and Statistical Analysis

Table A-1.—Industries included in the 1977 Wood Used in Manufacturing survey¹

SIC ² No.	Industry	SIC No.	Industry
2429	Special product sawmills	3421	Cutlery, hand tools
2431	Millwork	3423	Hand and edge tools
2434	Wood kitchen cabinets	3425	Hand saws
2439	Structural wood products not elsewhere classified	3442	Metal doors, sash, etc.
2441	Nailed wood boxes and shooK	3448	Prefab metal buildings
2448			
2449	Wood containers not elsewhere classified	3523	Farm machinery and equipment
2452	Prefabricated wood buildings	3537	Industrial trucks, trailers
2499	Wood products not elsewhere classified	3552	Textile machinery
		3565	Industrial patterns
2511	Wood household furniture, except upholstered	3585	Air conditioning, heating, commercial refrigerators
2512	Wood household furniture, upholstered		
2514		3612	Power, distribution, and specialty transformers
2515	Mattresses and bedsprings	3613	Switch gear and switchboards
2517	Wood television, radio, phono, sewing machine cabinets	3632	Household refrigerators and freezers
2519	Household furniture not elsewhere classified	3651	Radio and television receivers
2521	Wood office furniture	3661	Telephone and telegraph apparatus
2522	Metal office furniture		
2531		3713	Truck and bus bodies
2541	Wood partitions, shelving, lockers, fixtures	3714	Motor vehicle parts and accessories
2542	Metal partitions, shelving, lockers, fixtures	3715	Truck trailers
2591	Drapery hardware, window blinds, and shades	3728	Aircraft parts and equipment not elsewhere classified
		3731	Shipbuilding and repair
2621	Papermills, except building paper	3732	Boatbuilding and repair
2641	Paper coating and glazing	3792	Travel trailers and campers
3131	Boot and shoe cut stock and findings	3931	Musical instruments
3161	Luggage	3944	Games, toys, etc.
		3949	Sporting and athletic goods
3211	Flat glass	3991	Brooms and brushes
3251	Brick and structural clay tile	3993	Signs and advertising displays
		3995	Caskets
3312	Blast furnaces		
3351	Rolling, drawing, and extruding of copper		

¹ Ref. (8).

² SIC = Standard Industrial Classification.

Procedure

The 1977 Wood Used in Manufacturing Survey followed closely the design of the 1965 survey. The 1977 survey sampled 59 of the 452 industries described in the 1972 Standard Industrial Classification (SIC) Manual (8). Table A-1 lists by four-digit SIC codes the industries included in the survey. Based on data from the 1965 survey, these industries, plus the mobile home industry (SIC 2451) account for approximately 90 percent of all wood products used in manufacturing. The mobile home industry was not included in this survey because current lumber, plywood, and particleboard use data are available from a recent Forest Service study (2).

Complete files of establishments in the selected SIC groups coded by employee size class were obtained from Dun and Bradstreet.¹¹ Sampling rates were based on variations in wood use within employee size classes from the 1965 study and are reported in table A-2. This resulted in an initial sample of approximately 16,390 establishments.

With the exception of the wood products not elsewhere classified industry (SIC 2499), no establishments in size class 1 (one to four employees) were sampled. These establishments generally account for less than 5 percent of the total value of industry shipments. Estimates of wood consumption for these establishments were based on the ratio of their value of shipments to the industry total. Establishments in size class 1 for SIC 2499 were sampled because the products produced by this industry (picture frames, tool handles, pencil slats, ladders, dowels, etc.) require large volumes of wood and are typically produced by very small firms.

The initial and three followup mailings resulted in a response of 6,479, with 4,626 of these being usable. Unusable responses included those from establishments that were not operating in 1977, were no longer manufacturers, or returned an unanswered questionnaire.

¹¹ Dun and Bradstreet, Inc., Marketing Services Division, 99 Chichester Street, New York, N.Y. 10007.

Statistical Analysis

Analysis of the data was performed using ratio estimates in a stratified random sample.¹² The ratio of total wood use by form of wood to value of shipments was calculated for each size class from the sample.¹³ These ratios were multiplied by total value of industry shipments by size class from the 1977 Census of Manufactures (13) and summed over all size classes. This resulted in estimates of wood use by industry and form of wood. More specifically, for each industry, let:

- \hat{Y}_k = estimated total use of wood product k (i.e., lumber, plywood, etc.)
- Y_{jk} = reported quantity of product k consumed by establishment j in size class i
- x_{ji} = reported value of shipments by establishment j in size class i
- X_i = total value of industry shipments for size class i (from (13))
- n = number of size classes
- m = number of usable returned questionnaires.

Then, for all k

$$\hat{Y}_k = \sum_{i=1}^n \sum_{j=1}^m \frac{Y_{jk}}{x_{ji}} X_i \quad (1)$$

Equation (1) was used to estimate the consumption of wood product k for each of the 59 industries sampled. Summation over all industries results in estimated total use of product k by the sampled manufacturing industries. Based on results from the 1965 manufacturing survey (4), it was estimated that the 59 sampled industries in 1977 accounted for approximately 90 percent of total wood use. Total use by all manufacturing industries was then estimated by multiplying wood use by 0.9⁻¹.

¹² For a more detailed explanation of this procedure, see (1) or any other comprehensive sampling theory text.

¹³ Since size class 1 was only sampled for industry 2499, the weighted average ratio of wood use to value of shipments for all size classes was used for size class 1.

Table A-2.—Sampling rates by employee size class for the 1977 Wood Used in Manufacturing Survey

SIC ¹ No.	Sampling rates by employee size class								SIC ¹ No.	Sampling rates by employee size class							
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8
-----Pct-----																	
2429	0	25	50	50	100	100	100	100	3421	0	100	100	100	100	100	100	100
2431	0	25	25	50	50	100	100	100	3423	0	50	50	50	50	50	100	100
2434	0	25	50	50	100	100	100	100	3425	0	100	100	100	100	100	100	100
2439	0	50	50	50	100	100	100	100	3442	0	20	20	20	20	50	100	100
2441	0	50	50	50	100	100	100	100	3448	0	60	60	60	60	100	100	100
2448	0	50	50	50	100	100	100	100									
2449	0	50	50	50	100	100	100	100	3523	0	10	10	20	50	75	100	100
2452	0	50	50	50	50	100	100	100	3537	0	25	25	25	50	50	100	100
2499	20	30	30	30	50	100	100	100	3552	0	10	10	20	50	50	100	100
									3565	0	20	20	50	100	100	100	100
2511	0	25	25	25	50	50	100	100	3585	0	25	25	25	50	50	100	100
2512	0	20	20	20	50	50	100	100									
2514	0	20	20	20	50	100	100	100	3612	0	50	50	50	50	50	100	100
2515	0	20	20	20	50	100	100	100	3613	0	20	20	20	30	30	50	100
2517	0	100	100	100	100	100	100	100	3632	0	100	100	100	100	100	100	100
2519	0	50	50	50	100	100	100	100	3651	0	25	25	25	50	50	50	100
2522	0	50	50	50	50	50	100	100	3661	0	30	30	30	50	100	100	100
2531	0	30	30	30	50	50	100	100									
2541	0	20	20	20	50	100	100	100	3713	0	25	25	25	50	50	100	100
2542	0	20	20	20	50	100	100	100	3714	0	20	20	20	50	50	100	100
2591	0	25	50	50	100	100	100	100	3715	0	50	50	50	50	100	100	100
2599	0	50	50	50	100	100	100	100	3724	0	50	50	50	50	50	100	100
									3728	0	20	20	20	50	50	100	100
2621	0	100	100	50	50	50	50	50	3731	0	25	25	25	50	50	100	100
2641	0	20	20	20	50	50	100	100	3732	0	20	20	20	50	100	100	100
									3792	0	25	25	25	50	100	100	100
3131	0	50	50	50	100	100	100	100									
3161	0	50	50	50	100	100	100	100	3931	0	50	50	50	50	100	100	100
									3944	0	25	25	25	50	100	100	100
3211	0	100	100	100	100	100	100	100	3949	0	25	25	25	50	100	100	100
3251	0	50	50	20	20	50	100	100	3991	0	25	50	50	100	100	100	100
									3993	0	15	15	25	50	100	100	100
3312	0	50	50	50	50	50	50	50	3995	0	50	50	50	50	100	100	100
3351	0	100	100	50	50	50	50	50									

¹ SIC Standard Industrial Classification

Appendix B— Statistical Tables

Table B-1.—Wood products used in selected manufacturing industries in the U.S., by form of wood and industry, 1977
(Thousand square feet, 1-inch basis)

Industry number	Industry name	Lumber	Bolts	Plywood	Veneer	Hardboard	Insulation board	Particle-board	Medium density fiberboard	Total
2429	Special product sawmills, nec	51201.	394940.	0.	0.	0.	0.	0.	0.	446.41.
2431	Millwork	2429465.	0.	87832.	115055.	43794.	2392.	131160.	24907.	2834605.
2434	Wood kitchen cabinets	186204.	5578.	69617.	8496.	12411.	51.	177505.	21086.	486950.
2439	Structural wood members, nec	1153102.	0.	37647.	20.	23.	29.	512.	1160.	1192763.
2441	Nailed wood boxes and shooks	291289.	2488.	11466.	3271.	2291.	16.	2084.	1118.	314033.
2446	Wood pallets and skids	2510307.	12198.	40824.	0.	8228.	0.	2051.	0.	2573608.
2449	Wood containers, nec	170352.	81123.	18944.	25409.	328.	0.	1217.	810.	298183.
2451	Mobile homes	842080.	0.	198401.	0.	16793.	131575.	208789.	0.	1397638.
2452	Prefabricated wood buildings	895984.	0.	36666.	267.	2744.	6971.	21289.	967.	964077.
2499	Wood products, nec	1625260.	301094.	35367.	4017.	12782.	156.	68858.	322.	2047855.
2511	Wood household furniture	1464810.	0.	53837.	90336.	23307.	0.	184244.	154740.	1971274.
2512	Upholstered household furniture	481861.	0.	14312.	7263.	4050.	90998.	9768.	60052.	668105.
2514	Metal household furniture	52427.	0.	2724.	1152.	2811.	0.	17375.	4388.	80876.
2515	Mattresses and bedsprings	190503.	0.	5095.	14.	18.	0.	109.	64.	195862.
2517	Wood television and radio cabinets	63804.	0.	12104.	10977.	1877.	0.	65825.	3168.	157756.
2519	Household furniture, nec	9223.	0.	1460.	0.	69.	0.	4495.	0.	15746.
2521	Wood office furniture	94926.	0.	13437.	9753.	3038.	0.	25249.	1656.	148054.
2522	Metal office furniture	10844.	0.	4262.	471.	56.	4332.	35465.	103.	55512.
2531	Public building and related furniture	29986.	0.	6740.	4776.	197.	235.	56014.	4241.	702188.
2541	Wood partitions and fixtures	154087.	0.	84127.	7882.	17561.	92524.	115651.	27407.	499239.
2542	Metal partitions and fixtures	60820.	0.	45199.	90.	1245.	0.	109880.	23812.	241044.
2591	Drapery hardware and blinds & shades	8466.	0.	5.	3070.	0.	0.	725.	0.	12266.
2599	Furniture and fixtures, nec	35707.	0.	4537.	702.	228.	79.	27285.	4004.	72541.
2621	Paper mills, except building paper	56993.	0.	57.	467.	281.	0.	2.	0.	57800.
2641	Paper coating and glazing	8631.	0.	316.	0.	0.	0.	0.	0.	8947.
3131	Boot and shoe findings	21784.	0.	167.	0.	0.	0.	0.	791.	22741.
3161	Luggage	17578.	0.	16651.	408.	175.	0.	2674.	131.	37617.
3211	Flat glass	154421.	0.	8.	0.	0.	0.	244.	0.	154673.
3251	Brick and structural clay tile	16900.	0.	0.	6526.	0.	0.	32.	0.	23458.
3312	Blast furnaces and steel mills	119743.	0.	84.	369.	139.	0.	0.	0.	120336.
3351	Copper rolling and drawing	17348.	0.	113.	84.	0.	0.	398.	0.	17943.
3421	Cutlery	3822.	0.	38.	206.	0.	0.	0.	0.	4065.
3423	Hand and edge tools, nec	5008.	5520.	178.	12.	11.	0.	5.	0.	10733.
3425	Hand saws and saw blades	3519.	0.	36.	0.	15.	0.	0.	0.	3570.
3442	Metal doors, sash, and trim	36489.	0.	635.	14.	4411.	0.	755.	0.	42303.
3448	Prefabricated metal buildings	81719.	0.	29599.	186.	2332.	111.	1913.	5.	115865.
3523	Farm machinery and equipment	144079.	0.	15259.	88.	0.	0.	0.	0.	159426.
3537	Industrial trucks and tractors	10515.	0.	628.	797.	16.	0.	0.	0.	11955.
3552	Textile machinery	7599.	0.	192.	37.	36.	0.	42.	11.	7917.
3565	Industrial patterns	10320.	0.	1268.	328.	2.	0.	62.	0.	11980.
3585	Refrigeration and heating equipment	86351.	0.	2318.	48.	241.	36.	893.	207.	90095.
3612	Transformers	13858.	0.	78.	4.	262.	139.	342.	0.	14683.
3613	Switchgear and switchboard apparatus	11037.	0.	546.	1270.	0.	0.	1.	0.	12854.
3632	Household refrigerators and freezers	300.	0.	603.	31931.	25904.	0.	7.	0.	58744.
3651	Radio and TV communication equipment	182372.	0.	475.	7150.	43927.	0.	614988.	4185.	853097.
3661	Telephone and telegraph apparatus	3624.	0.	683.	0.	0.	0.	0.	0.	4307.
3713	Truck and bus bodies	11105.	0.	3386.	0.	0.	0.	20.	23.	14533.
3714	Motor vehicle parts and accessories	68746.	814.	3791.	241.	538.	0.	36.	0.	74165.
3715	Truck trailers	37065.	97.	5736.	0.	11.	0.	0.	0.	42909.
3724	Aircraft engines and engine parts	1975.	0.	468.	0.	5.	0.	6.	0.	2455.
3728	Aircraft equipment, nec	3648.	0.	103.	0.	0.	0.	2.	0.	3753.
3731	Ship building and repairing	7672.	0.	2972.	0.	12.	0.	64.	0.	10719.
3732	Boat building and repairing	45717.	0.	56804.	261.	47.	30.	53.	25.	102936.
3792	Travel trailers and campers	239442.	0.	46462.	11154.	130.	344.	19112.	440.	317084.
3931	Musical instruments	235362.	0.	11894.	9060.	362.	44.	13645.	0.	270366.
3944	Games, toys, and children's vehicles	65476.	0.	7767.	18.	653.	0.	2137.	20.	76072.
3949	Sporting and athletic goods, nec	102665.	20722.	6366.	499.	557.	0.	46431.	1701.	178941.
3991	Brooms and brushes	15320.	0.	255.	0.	0.	0.	11.	0.	15586.
3993	Signs and advertising displays	27609.	0.	6399.	489.	1541.	4.	1547.	1335.	38924.
3995	Burial caskets	78604.	0.	1274.	0.	24.	40.	8003.	0.	87945.
Total, sampled industries		14767124.	824574.	1008210.	364667.	235482.	330369.	1978967.	342878.	19852272.
Adjusted total, all industries		16407916.	916193.	1120233.	405185.	261646.	367077.	2198852.	380976.	22058940.

Table B-2.—Wood products used in selected manufacturing industries in the U.S., by form of wood and industry, 1977
(Thousand units)

Industry number	Industry name	Lumber		Bolts		Plywood		Veneer	
		Quantity	Standard error	Quantity	Standard error	Quantity	Standard error	Quantity	Standard error
		Percent Bd ft of total		Percent Bd ft of total		Sq ft (3/8-in) of total	Percent of total	Sq ft (3/8-in) of total	Percent of total
2429	Special product sawmills, nec	51201.	49.2	394940.	21.8	0.	0.0	0.	0.0
2431	Millwork	2429465.	19.9	0.	0.0	234218.	47.4	336814.	53.3
2434	Wood kitchen cabinets	186204.	25.1	5578.	93.5	185646.	41.6	22656.	40.5
2439	Structural wood members, nec	1153102.	13.6	0.	0.0	100393.	71.4	53.	69.1
2441	Nailed wood boxes and shooks	291289.	31.7	2488.	225.5	30577.	49.4	8722.	119.2
2448	Wood pallets and skids	2510307.	9.8	12198.	96.3	108865.	70.3	0.	0.0
2449	Wood containers, nec	170352.	30.7	81121.	72.8	50517.	73.1	67356.	62.5
2451	Mobile homes	842080.	---	0.	---	529070.	---	0.	---
2452	Prefabricated wood buildings	895984.	52.9	0.	0.0	97775.	58.8	713.	54.7
2499	Wood products, nec	1625260.	24.2	301094.	51.6	94311.	55.3	10712.	61.6
2511	Wood household furniture	1464810.	51.9	0.	0.0	143565.	92.7	240897.	123.6
2512	Upholstered household furniture	481861.	49.3	0.	0.0	38166.	56.9	19367.	78.2
2514	Metal household furniture	52427.	59.9	0.	0.0	7263.	102.8	3073.	73.4
2515	Mattresses and bedsprings	190503.	27.9	0.	0.0	13586.	16.9	37.	194.4
2517	Wood television and radio cabinets	63804.	4.3	0.	0.0	32278.	20.7	29273.	2.0
2519	Household furniture, nec	9223.	57.2	0.	0.0	3893.	6.9	0.	0.0
2521	Wood office furniture	94926.	37.7	0.	0.0	35831.	42.2	26007.	55.5
2522	Metal office furniture	10844.	50.3	0.	0.0	11364.	50.9	1736.	122.5
2531	Public building and related furniture	29986.	69.6	0.	0.0	17973.	66.5	1137.	58.0
2541	Wood partitions and fixtures	154087.	67.2	0.	0.0	224339.	69.0	21019.	82.5
2542	Metal partitions and fixtures	60820.	59.8	0.	0.0	120530.	62.7	239.	95.6
2591	Drapery hardware and blinds & shades	8466.	52.2	0.	0.0	14.	55.4	8187.	67.2
2599	Furniture and fixtures, nec	35707.	91.8	0.	0.0	12098.	72.1	1871.	264.7
2621	Paper mills, except building paper	56993.	84.7	0.	0.0	152.	115.6	1245.	112.8
2641	Paper coating and glazing	8631.	52.6	0.	0.0	842.	62.6	0.	0.0
3131	Boot and shoe findings	21784.	105.3	0.	0.0	445.	39.8	0.	0.0
3161	Luggage	17578.	42.8	0.	0.0	44403.	25.6	1087.	101.5
3211	Flat glass	154421.	1.8	0.	0.0	21.	36.3	0.	0.0
3251	Brick and structural clay tile	16900.	102.0	0.	0.0	0.	0.0	17403.	95.5
3312	Blast furnaces and steel mills	119743.	16.5	0.	0.0	225.	114.9	985.	84.9
3351	Copper rolling and drawing	17348.	61.7	0.	0.0	302.	26.9	225.	26.6
3421	Cutlery	3822.	47.3	0.	0.0	100.	93.7	549.	78.9
3423	Hand and edge tools, nec	5008.	88.3	5520.	70.8	474.	83.3	32.	1338.0
3425	Hand saws and saw blades	3519.	62.9	0.	0.0	97.	57.6	0.	0.0
3442	Metal doors, sash, and trim	36489.	75.5	0.	0.0	1693.	94.9	36.	99.5
3448	Prefabricated metal buildings	81719.	55.3	0.	0.0	78931.	73.8	497.	119.4
3523	Farm machinery and equipment	144079.	22.1	0.	0.0	40691.	42.7	235.	56.8
3537	Industrial trucks and tractors	10515.	82.1	0.	0.0	1674.	44.2	2124.	31.6
3552	Textile machinery	7599.	39.7	0.	0.0	512.	112.5	98.	79.4
3565	Industrial patterns	10320.	21.2	0.	0.0	3382.	29.6	874.	56.6
3585	Refrigeration and heating equipment	86351.	28.7	0.	0.0	6182.	70.7	128.	98.1
3612	Transformers	13858.	38.7	0.	0.0	208.	59.9	11.	79.9
3613	Switchgear and switchboard apparatus	11037.	44.4	0.	0.0	1455.	53.1	3387.	49.3
3632	Household refrigerators and freezers	300.	0.0	0.	0.0	1607.	3.6	85150.	0.9
3651	Radio and TV communication equipment	182372.	20.3	0.	0.0	1267.	91.0	19066.	28.1
3661	Telephone and telegraph apparatus	3624.	26.6	0.	0.0	1820.	36.0	0.	0.0
3713	Truck and bus bodies	11105.	47.1	0.	0.0	9029.	53.4	0.	0.0
3714	Motor vehicle parts and accessories	68746.	43.0	814.	140.5	10109.	90.3	642.	303.0
3715	Truck trailers	37065.	43.8	97.	151.2	15295.	91.0	0.	0.0
3724	Aircraft engines and engine parts	1975.	35.3	0.	0.0	1249.	26.5	0.	0.0
3728	Aircraft equipment, nec	3648.	52.2	0.	0.0	275.	83.1	0.	273.1
3731	Ship building and repairing	7672.	92.7	0.	0.0	7924.	63.7	0.	0.0
3732	Boat building and repairing	45717.	47.6	0.	0.0	151477.	30.2	697.	84.3
3792	Travel trailers and campers	239442.	65.6	0.	0.0	123898.	24.9	29744.	66.0
3931	Musical instruments	235362.	16.7	0.	0.0	31717.	12.8	24154.	9.4
3944	Games, toys, and children's vehicles	65476.	57.7	0.	0.0	20713.	57.7	48.	76.4
3949	Sporting and athletic goods, nec	102665.	44.8	20722.	67.4	16977.	24.2	1330.	112.5
3991	Brooms and brushes	15320.	39.6	0.	0.0	680.	41.2	0.	0.0
3993	Signs and advertising displays	27609.	35.3	0.	0.0	17064.	36.3	1303.	67.9
3995	Burial caskets	78604.	11.9	0.	0.0	3398.	50.6	0.	0.0
Total, sampled industries		14767124.		824574.		2688563.		971444.	
Adjusted total, all industries		16407916.		916193.		2987284.		1080493.	

Table B-2.—Wood products used in selected manufacturing industries in the U.S., by form of wood and industry, 1977—continued
(Thousand units)

Industry number	Industry name	Hardboard		Insulation board		Particleboard		Medium density fiberboard	
		Quantity	Standard error	Quantity	Standard error	Quantity	Standard error	Quantity	Standard error
		Sq ft (1/8-in) of total	Percent of total	Sq ft (1/2-in) of total	Percent of total	Sq ft (3/4-in) of total	Percent of total	Sq ft (3/4-in) of total	Percent of total
2429	Special product sawmills, nec	0.	0.0	0.	0.0	0.	0.0	0.	0.0
2431	Millwork	350349.	33.9	4784.	73.4	174880.	43.2	33209.	43.4
2434	Wood kitchen cabinets	99284.	50.2	106.	56.8	236673.	31.8	28115.	57.1
2439	Structural wood members, nec	186.	82.0	593.	61.4	683.	85.4	1546.	77.5
2441	Nailed wood boxes and shooks	18328.	226.4	31.	241.2	2779.	86.1	1491.	241.2
2448	Wood pallets and skids	65825.	89.8	0.	0.0	2734.	107.8	0.	0.0
2449	Wood containers, nec	2623.	47.8	0.	0.0	1623.	53.0	1080.	43.9
2451	Mobile homes	134345.	---	263150.	---	278385.	---	0.	---
2452	Prefabricated wood buildings	21954.	58.8	13941.	69.2	28385.	58.0	1289.	49.8
2499	Wood products, nec	102254.	67.1	311.	89.2	91811.	87.3	429.	59.7
2511	Wood household furniture	186459.	100.1	0.	0.0	245658.	59.8	206320.	70.1
2512	Upholstered household furniture	32396.	86.1	181996.	88.1	13024.	75.0	80071.	57.5
2514	Metal household furniture	22489.	60.7	0.	0.0	23166.	75.2	5850.	74.9
2515	Mattresses and bedsprings	146.	46.4	0.	0.0	145.	59.3	85.	46.4
2517	Wood television and radio cabinets	15013.	43.7	0.	0.0	87767.	17.2	4224.	36.0
2519	Household furniture, nec	549.	21.2	0.	0.0	5993.	44.6	0.	0.0
2521	Wood office furniture	24305.	26.5	0.	0.0	33665.	49.3	2208.	64.7
2522	Metal office furniture	447.	70.4	8663.	73.6	47287.	130.0	137.	122.7
2531	Public building and related furniture	1575.	90.3	469.	114.2	74685.	59.8	5654.	66.5
2541	Wood partitions and fixtures	140490.	52.6	185047.	78.1	154201.	45.4	36543.	59.1
2542	Metal partitions and fixtures	9958.	73.7	0.	0.0	146506.	59.1	31749.	57.1
2591	Drapery hardware and blinds & shades	0.	0.0	0.	0.0	966.	56.8	0.	0.0
2599	Furniture and fixtures, nec	1826.	93.6	157.	63.7	36380.	45.0	5339.	66.5
2621	Paper mills, except building paper	2246.	170.3	0.	0.0	3.	78.1	0.	0.0
2641	Paper coating and glazing	0.	0.0	0.	0.0	0.	0.0	0.	0.0
3131	Boot and shoe findings	0.	0.0	0.	0.0	0.	0.0	1054.	50.7
3161	Luggage	1402.	12.9	0.	0.0	3565.	52.8	175.	101.6
3211	Flat glass	0.	0.0	0.	0.0	325.	124.0	0.	0.0
3251	Brick and structural clay tile	0.	0.0	0.	0.0	43.	121.1	0.	0.0
3312	Blast furnaces and steel mills	1115.	94.0	0.	0.0	0.	0.0	0.	0.0
3351	Copper rolling and drawing	0.	0.0	0.	0.0	530.	3.9	0.	0.0
3421	Cutlery	0.	0.0	0.	0.0	0.	0.0	0.	0.0
3423	Hand and edge tools, nec	88.	72.7	0.	0.0	6.	1282.0	0.	0.0
3425	Hand saws and saw blades	116.	43.9	0.	0.0	0.	0.0	0.	0.0
3442	Metal doors, sash, and trim	35287.	94.4	0.	0.0	1006.	92.4	0.	0.0
3448	Prefabricated metal buildings	18659.	93.8	221.	55.2	2550.	76.9	7.	113.8
3523	Farm machinery and equipment	0.	0.0	0.	0.0	0.	0.0	0.	0.0
3537	Industrial trucks and tractors	126.	739.5	0.	0.0	0.	0.0	0.	0.0
3552	Textile machinery	286.	180.5	0.	0.0	56.	151.1	15.	251.2
3565	Industrial patterns	15.	49.0	0.	0.0	83.	49.6	0.	0.0
3585	Refrigeration and heating equipment	1929.	116.5	72.	131.1	1191.	75.1	276.	126.4
3612	Transformers	2096.	53.5	277.	67.2	456.	67.2	0.	0.0
3613	Switchgear and switchboard apparatus	0.	0.0	0.	0.0	1.	172.0	0.	0.0
3632	Household refrigerators and freezers	207229.	2.3	0.	0.0	9.	1.1	0.	0.0
3651	Radio and TV communication equipment	351419.	32.5	0.	0.0	819984.	11.6	5580.	129.5
3661	Telephone and telegraph apparatus	0.	0.0	0.	0.0	0.	0.0	0.	0.0
3713	Truck and bus bodies	0.	0.0	0.	0.0	26.	73.9	30.	61.8
3714	Motor vehicle parts and accessories	4301.	255.8	0.	0.0	48.	137.1	0.	0.0
3715	Truck trailers	87.	37.1	0.	0.0	0.	0.0	0.	0.0
3724	Aircraft engines and engine parts	42.	45.1	0.	0.0	8.	38.3	0.	0.0
3728	Aircraft equipment, nec	0.	0.0	0.	0.0	2.	278.4	0.	0.0
3731	Ship building and repairing	97.	69.1	0.	0.0	85.	102.5	0.	0.0
3732	Boat building and repairing	372.	74.0	59.	93.0	70.	121.7	33.	96.3
3792	Travel trailers and campers	1040.	82.6	688.	41.3	25482.	42.1	587.	89.5
3931	Musical instruments	2894.	6.5	87.	78.5	18193.	1.4	0.	0.0
3944	Games, toys, and children's vehicles	5227.	71.0	0.	0.0	2849.	74.	27.	125.7
3949	Sporting and athletic goods, nec	4455.	60.6	0.	0.0	61908.	14.8	2268.	17.1
3991	Brooms and brushes	0.	0.0	0.	0.0	14.	62.7	0.	0.0
3993	Signs and advertising displays	12329.	51.5	7.	69.6	2063.	49.2	1780.	36.1
3995	Burial caskets	195.	88.2	79.	84.5	10670.	67.0	0.	0.0
Total, sampled industries		1883853.		660738.		2638622.		457171.	
Adjusted total, all industries		2093170.		734153.		2931807.		507968.	

Table B-3.—Wood products used per \$1,000 of value of shipments in selected manufacturing industries in the U.S., by form of wood and industry, 1977
(Units per \$1,000)

Industry number	Industry name	Lumber	Bolts	Plywood	Veneer	Hardboard	Insulation board	Particle board	Medium density fiberboard
		Bd ft	Bd ft	Sq ft (3/8-in)	Sq ft (3/8-in)	Sq ft (1/8-in)	Sq ft (1/2-in)	Sq ft (3/4-in)	Sq ft (3/4-in)
2429	Special product sawmills, nec	202.8	1564.1	0.0	0.0	0.0	0.0	0.0	0.0
2431	Millwork	618.5	0.0	59.6	78.1	89.2	1.2	44.5	8.5
2434	Wood kitchen cabinets	117.1	3.5	116.7	14.2	62.4	0.1	148.8	17.7
2439	Structural wood members, nec	1427.6	0.0	124.3	0.1	0.2	0.7	0.8	1.9
2441	Nailed wood boxes and shooks	1106.7	9.5	116.2	33.1	69.6	0.1	10.6	5.7
2448	Wood pallets and skids	3596.4	17.5	156.0	0.0	94.3	0.0	3.9	0.0
2449	Wood containers, nec	666.0	317.1	197.5	264.9	10.3	0.0	6.3	4.2
2451	Mobile homes	259.7	0.0	163.1	0.0	41.4	81.1	85.8	0.0
2452	Prefabricated wood buildings	459.8	0.0	50.2	0.4	11.3	7.2	14.6	0.7
2499	Wood products, nec	635.5	117.7	36.9	4.2	40.0	0.1	35.9	0.2
2511	Wood household furniture	353.8	0.0	34.7	58.2	45.0	0.0	59.3	49.8
2512	Upholstered household furniture	164.4	0.0	13.0	6.6	11.1	62.1	4.4	27.3
2514	Metal household furniture	40.1	0.0	5.6	2.4	17.2	0.0	17.7	4.5
2515	Mattresses and bedsprings	136.2	0.0	9.7	0.0	0.1	0.0	0.1	0.1
2517	Wood television and radio cabinets	209.4	0.0	105.9	96.1	49.3	0.0	288.0	13.9
2519	Household furniture, nec	30.5	0.0	12.9	0.0	1.8	0.0	19.9	0.0
2521	Wood office furniture	155.1	0.0	58.5	42.5	39.7	0.0	55.0	3.6
2522	Metal office furniture	7.8	0.0	8.1	0.9	0.3	6.2	33.8	0.1
2531	Public building and related furniture	38.1	0.0	22.8	16.2	2.0	0.6	94.9	7.2
2541	Wood partitions and fixtures	139.3	0.0	202.9	19.0	127.0	167.3	139.4	33.0
2542	Metal partitions and fixtures	46.7	0.0	92.5	0.2	7.6	0.0	112.4	24.4
2591	Drapery hardware and blinds & shades	12.5	0.0	0.0	12.1	0.0	0.0	1.4	0.0
2599	Furniture and fixtures, nec	50.6	0.0	17.2	2.7	2.6	0.2	51.6	7.6
2621	Paper mills, except building paper	4.5	0.0	0.0	0.1	0.2	0.0	0.0	0.0
2641	Paper coating and glazing	2.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3131	Boot and shoe findings	80.5	0.0	1.6	0.0	0.0	0.0	0.0	3.9
3161	Luggage	26.8	0.0	67.8	1.7	2.1	0.0	5.4	0.3
3211	Flat glass	97.9	0.0	0.0	0.0	0.0	0.0	0.2	0.0
3251	Brick and structural clay tile	21.7	0.0	0.0	22.4	0.0	0.0	0.1	0.0
3312	Blast furnaces and steel mills	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3351	Copper rolling and drawing	4.3	0.0	0.1	0.1	0.0	0.0	0.1	0.0
3421	Cutlery	5.4	0.0	0.1	0.8	0.0	0.0	0.0	0.0
3423	Hand and edge tools, nec	2.2	2.4	0.2	0.0	0.0	0.0	0.0	0.0
3425	Hand saws and saw blades	9.7	0.0	0.3	0.0	0.3	0.0	0.0	0.0
3442	Metal doors, sash, and trim	11.6	0.0	0.5	0.0	11.3	0.0	0.3	0.0
3448	Prefabricated metal buildings	45.9	0.0	44.4	0.3	10.5	0.1	1.4	0.0
3523	Farm machinery and equipment	14.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
3537	Industrial trucks and tractors	5.5	0.0	0.9	1.1	0.1	0.0	0.0	0.0
3552	Textile machinery	8.0	0.0	0.5	0.1	0.3	0.0	0.1	0.0
3565	Industrial patterns	32.2	0.0	10.5	2.7	0.0	0.0	0.3	0.0
3585	Refrigeration and heating equipment	9.0	0.0	0.6	0.0	0.2	0.0	0.1	0.0
3612	Transformers	6.3	0.0	0.1	0.0	1.0	0.1	0.2	0.0
3613	Switchgear and switchboard apparatus	3.1	0.0	0.4	1.0	0.0	0.0	0.0	0.0
3632	Household refrigerators and freezers	0.1	0.0	0.6	33.0	80.4	0.0	0.0	0.0
3651	Radio and TV communication equipment	31.8	0.0	0.2	3.3	61.3	0.0	143.0	1.0
3661	Telephone and telegraph apparatus	0.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3713	Truck and bus bodies	5.5	0.0	4.5	0.0	0.0	0.0	0.0	0.0
3714	Motor vehicle parts and accessories	1.9	0.0	0.3	0.0	0.1	0.0	0.0	0.0
3715	Truck trailers	19.4	0.1	8.0	0.0	0.0	0.0	0.0	0.0
3724	Aircraft engines and engine parts	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3728	Aircraft equipment, nec	0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3731	Ship building and repairing	1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0
3732	Boat building and repairing	25.1	0.0	83.1	0.4	0.2	0.0	0.0	0.0
3792	Travel trailers and campers	151.3	0.0	78.3	18.8	0.7	0.4	16.1	0.4
3931	Musical instruments	254.5	0.0	34.3	26.1	3.1	0.1	19.7	0.0
3944	Games, toys, and children's vehicles	24.1	0.0	7.6	0.0	1.9	0.0	1.0	0.0
3949	Sporting and athletic goods, nec	42.3	8.5	7.0	0.5	1.8	0.0	25.5	3.9
3991	Brooms and brushes	22.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0
3993	Signs and advertising displays	15.9	0.0	9.8	0.7	7.1	0.0	1.2	1.2
3995	Burial caskets	155.4	0.0	6.7	0.0	0.4	0.0	0.0	0.0

Table B-4.—Lumber used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand board feet)

Industry number	Industry name	Industry total	Products made for sale	Total, own use	Patterns, patterns & fixtures	Total	For sale	For own use	Total
2429	Special product sawmills, nec	51201.	46926.	4274.	0.	4274.	4274.	0.	4274.
2431	Millwork	2429465.	2410167.	19298.	74.	19372.	19372.	0.	19372.
2434	Wood kitchen cabinets	186204.	185712.	492.	0.	492.	492.	0.	492.
2439	Structural wood members, nec	1153102.	1151703.	1399.	0.	1399.	1399.	0.	1399.
2441	Nailed wood boxes and shooks	291289.	290039.	1250.	0.	1250.	1250.	0.	1250.
2448	Wood pallets and skids	2510307.	2510291.	16.	0.	16.	16.	0.	16.
2449	Wood containers, nec	170352.	170177.	174.	0.	174.	174.	0.	174.
2451	Mobile homes /1	842080.	842080.	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	895984.	895539.	446.	295.	741.	741.	0.	741.
2499	Wood products, nec	1625260.	1621554.	3706.	170.	3876.	3876.	0.	3876.
2511	Wood household furniture	1464810.	1440267.	24543.	1907.	26450.	15343.	11107.	26450.
2512	Upholstered household furniture	481861.	478451.	3409.	129.	3538.	1366.	2172.	3538.
2514	Metal household furniture	52427.	51929.	499.	0.	499.	499.	0.	499.
2515	Mattresses and bedsprings	190503.	186740.	3764.	0.	3764.	2442.	1322.	3764.
2517	Wood television and radio cabinets	63804.	63386.	419.	0.	419.	106.	313.	419.
2519	Household furniture, nec	9223.	9115.	108.	0.	108.	1.	107.	108.
2521	Wood office furniture	94926.	92955.	1971.	0.	1971.	1595.	376.	1971.
2522	Metal office furniture	10844.	5839.	5005.	24.	4981.	4304.	677.	4981.
2531	Public building and related furniture	29986.	29415.	570.	0.	570.	243.	327.	570.
2541	Wood partitions and fixtures	154087.	153026.	1060.	10.	1070.	327.	743.	1070.
2542	Metal partitions and fixtures	60820.	58385.	2434.	0.	2434.	211.	2223.	2434.
2591	Drapery hardware and blinds & shades	8466.	8143.	323.	0.	323.	1.	322.	323.
2599	Furniture and fixtures, nec	35707.	34450.	1257.	25.	1282.	945.	337.	1282.
2621	Paper mills, except building paper	56993.	0.	56993.	0.	56993.	55093.	1100.	56993.
2641	Paper coating and glazing	8631.	0.	8631.	0.	8631.	7458.	1173.	8631.
3131	Shoe and shoe findings	21784.	21781.	3.	0.	3.	3.	0.	3.
3161	Luggage	17578.	17578.	0.	0.	0.	0.	0.	0.
3211	Flat glass	154421.	3640.	150781.	0.	150781.	22734.	128047.	150781.
3251	Brick and structural clay tile	16900.	19.	16881.	0.	16881.	15794.	1187.	16881.
3312	Blast furnaces and steel mills	119743.	24331.	95412.	23.	95435.	17114.	78321.	95435.
3351	Copper rolling and drawing	17348.	1.	17346.	0.	17346.	3405.	13941.	17346.
3421	Cutlery	3822.	3030.	791.	0.	791.	0.	791.	791.
3423	Hand and edge tools, nec	5008.	4214.	795.	0.	795.	144.	651.	795.
3425	Hand saws and saw blades	3519.	2636.	884.	2.	886.	131.	755.	886.
3442	Metal doors, sash, and trim	36489.	30630.	5859.	1.	5860.	1588.	4272.	5860.
3448	Prefabricated metal buildings	81719.	55659.	26060.	88.	25972.	14702.	11270.	25972.
3523	Farm machinery and equipment	144079.	65637.	78442.	1144.	77298.	50175.	27123.	77298.
3537	Industrial trucks and tractors	10515.	6430.	4085.	0.	4085.	3463.	622.	4085.
3552	Textile machinery	7599.	882.	6718.	2.	6720.	620.	6100.	6720.
3565	Industrial patterns	10320.	9014.	1306.	1002.	304.	92.	212.	1306.
3585	Refrigeration and heating equipment	86351.	15350.	71000.	144.	70856.	55661.	12536.	70856.
3612	Transformers	13858.	2029.	11829.	0.	11829.	11012.	817.	11829.
3613	Switchgear and switchboard apparatus	11037.	2191.	8846.	0.	8846.	1995.	6851.	8846.
3632	Household refrigerators and freezers	300.	285.	14.	0.	14.	0.	14.	14.
3651	Radio and TV communication equipment	182372.	181511.	861.	802.	863.	55.	808.	863.
3661	Telephone and telegraph apparatus	3624.	892.	2732.	0.	2732.	976.	1756.	2732.
3713	Truck and bus bodies	11105.	7738.	3367.	0.	3367.	2412.	955.	3367.
3714	Motor vehicle parts and accessories	68746.	2882.	65865.	429.	65436.	47267.	18169.	65436.
3715	Truck trailers	37065.	36825.	241.	0.	241.	0.	241.	241.
3724	Aircraft engines and engine parts	1975.	0.	1976.	66.	1910.	1145.	765.	1976.
3728	Aircraft equipment, nec	3648.	270.	3379.	6.	3373.	1043.	2330.	3379.
3731	Ship building and repairing	7672.	3806.	3865.	109.	3756.	68.	3688.	3756.
3732	Boat building and repairing	45717.	44486.	1231.	249.	982.	634.	348.	982.
3792	Travel trailers and campers	239442.	239141.	302.	117.	185.	14.	171.	302.
3931	Musical instruments	235362.	233368.	1993.	376.	1617.	222.	1395.	1993.
3944	Games, toys, and children's vehicles	65476.	65348.	127.	53.	74.	51.	23.	127.
3949	Sporting and athletic goods, nec	102665.	82131.	20535.	6.	20529.	125.	1934.	20535.
3991	Brooms and brushes	15320.	15113.	206.	1.	205.	50.	155.	205.
3993	Signs and advertising displays	27609.	8227.	19383.	1043.	18340.	13553.	4787.	18340.
3995	Burial caskets	78604.	78247.	358.	0.	358.	350.	8.	358.
Total, sampled industries		14767124.	14001611.	765514.	9208.	7664319.	571212.	1952107.	7664319.
Adjusted total, all industries		16407916.	15557346.	850571.	10241.	8403407.	412458.	2323449.	8403407.

1/ Industry 2451--Mobile homes data not available by use

Table B-5.—Hardwood and softwood lumber used in selected manufacturing industries in products made for sale, and for other uses, 1977
(Thousand board feet)

Industry number	Industry name	Industry total		Products made for sale		All other uses	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	10259.	40942.	8207.	38719.	2052.	2223.
2431	Millwork	388222.	2041244.	376009.	2034158.	12212.	7986.
2434	Wood kitchen cabinets	136580.	49624.	136279.	49433.	301.	191.
2439	Structural wood members, nec	42671.	1110432.	41850.	1109853.	820.	579.
2441	Nailed wood boxes and shooks	131854.	159435.	131505.	158534.	349.	901.
2448	Wood pallets and skids	1789470.	720837.	1789461.	720830.	9.	7.
2449	Wood containers, nec	109956.	60396.	109823.	60354.	133.	42.
2451	Mobile homes /1	16842.	825238.	16842.	825238.	---	---
2452	Prefabricated wood buildings	1269.	894716.	1118.	894421.	151.	295.
2499	Wood products, nec	513961.	1111299.	512343.	1109210.	1618.	2089.
2511	Wood household furniture	773936.	690874.	765965.	674302.	7971.	16572.
2512	Upholstered household furniture	391261.	90599.	389682.	88769.	1580.	1829.
2514	Metal household furniture	32036.	20391.	31556.	20373.	480.	19.
2515	Mattresses and bedsprings	30333.	160170.	28730.	158010.	1603.	2161.
2517	Wood television and radio cabinets	58708.	5096.	58603.	4783.	106.	313.
2519	Household furniture, nec	6052.	3171.	6051.	3064.	1.	107.
2521	Wood office furniture	63281.	31645.	62073.	30881.	1207.	764.
2522	Metal office furniture	7646.	3198.	5820.	20.	1827.	3178.
2531	Public building and related furniture	22574.	7412.	22135.	7280.	438.	132.
2541	Wood partitions and fixtures	59273.	94815.	58949.	94076.	324.	739.
2542	Metal partitions and fixtures	14153.	46667.	12225.	46160.	1928.	506.
2591	Drapery hardware and blinds & shades	4734.	3732.	4718.	3425.	16.	307.
2599	Furniture and fixtures, nec	29316.	6391.	29154.	5296.	162.	1094.
2621	Paper mills, except building paper	23765.	33228.	0.	0.	23765.	33228.
2641	Paper coating and glazing	3440.	5191.	0.	0.	3439.	5191.
3131	Boot and shoe findings	1387.	20397.	1387.	20394.	0.	3.
3161	Luggage	667.	16911.	667.	16911.	0.	0.
3211	Flat glass	62844.	91577.	0.	3640.	62844.	87937.
3251	Brick and structural clay tile	16521.	379.	19.	0.	16502.	379.
3312	Blast furnaces and steel mills	79660.	40083.	84.	24247.	79576.	15836.
3351	Copper rolling and drawing	1671.	15677.	0.	1.	1670.	15677.
3421	Cutlery	2769.	1052.	2503.	528.	267.	525.
3423	Hand and edge tools, nec	3427.	1581.	3264.	950.	163.	631.
3425	Hand saws and saw blades	2691.	829.	2636.	0.	55.	829.
3442	Metal doors, sash, and trim	2123.	34366.	15.	30616.	2109.	3750.
3448	Prefabricated metal buildings	16584.	65135.	1270.	54389.	15314.	10746.
3523	Farm machinery and equipment	59700.	84379.	1583.	64055.	58119.	20324.
3537	Industrial trucks and tractors	5231.	5283.	2963.	3466.	2268.	1817.
3552	Textile machinery	5951.	1648.	882.	0.	5069.	1648.
3565	Industrial patterns	4077.	6243.	3703.	5311.	374.	932.
3585	Refrigeration and heating equipment	41078.	45274.	3668.	11682.	37410.	33591.
3612	Transformers	3229.	10629.	1147.	882.	2082.	9747.
3613	Switchgear and switchboard apparatus	1885.	9153.	0.	2191.	1885.	6961.
3632	Household refrigerators and freezers	14.	285.	0.	285.	14.	0.
3651	Radio and TV communication equipment	155487.	26885.	154632.	26880.	855.	5.
3661	Telephone and telegraph apparatus	1126.	2498.	108.	783.	1018.	1714.
3713	Truck and bus bodies	6294.	4811.	4832.	2905.	1462.	1906.
3714	Motor vehicle parts and accessories	44706.	24039.	1518.	1363.	43188.	22676.
3715	Truck trailers	19751.	17314.	19510.	17314.	241.	0.
3724	Aircraft engines and engine parts	639.	1337.	0.	0.	639.	1336.
3728	Aircraft equipment, nec	120.	3528.	1.	268.	119.	3260.
3731	Ship building and repairing	5394.	2278.	1745.	2061.	3650.	216.
3732	Boat building and repairing	21986.	23731.	21533.	22953.	453.	778.
3792	Travel trailers and campers	7562.	231879.	7386.	231754.	176.	126.
3931	Musical instruments	152364.	82998.	151316.	82052.	1048.	946.
3944	Games, toys, and children's vehicles	39861.	25615.	39793.	25555.	67.	54.
3949	Sporting and athletic goods, nec	90048.	12617.	69736.	12395.	20312.	223.
3991	Brooms and brushes	12741.	2579.	12727.	2385.	14.	193.
3993	Signs and advertising displays	14634.	12975.	689.	7538.	13945.	5438.
3995	Burial caskets	57474.	21131.	57116.	21131.	358.	0.
Total, sampled industries		5603288.	9163839.	5167531.	8834074.	435758.	3,9782.
Adjusted total, all industries		6225876.	10182044.				

1/ Industry 2451--Mobile homes data not available by use

Table B-6.—Hardwood and softwood lumber used in selected manufacturing industries for packaging, shipping, and materials handling, 1977 (Thousand board feet)

Industry number	Industry name	Pallets		Containers		Dunnage	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	2052.	2223.	0.	0.	0.	0.
2431	Millwork	286.	6396.	5.	585.	11262.	0.
2434	Wood kitchen cabinets	187.	191.	0.	0.	112.	0.
2439	Structural wood members, nec	0.	398.	0.	96.	820.	0.
2441	Nailed wood boxes and shooks	55.	897.	0.	0.	234.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	1.	39.	0.	0.	126.	0.
2451	Mobile homes /1	---	---	---	---	---	---
2452	Prefabricated wood buildings	0.	0.	0.	0.	151.	0.
2499	Wood products, nec	788.	1649.	0.	313.	767.	0.
2511	Wood household furniture	1925.	13422.	21.	1433.	5835.	0.
2512	Upholstered household furniture	537.	789.	117.	977.	860.	0.
2514	Metal household furniture	43.	12.	0.	7.	437.	0.
2515	Mattresses and bedsprings	870.	1572.	732.	586.	1.	0.
2517	Wood television and radio cabinets	106.	0.	0.	312.	0.	0.
2519	Household furniture, nec	1.	0.	0.	107.	0.	0.
2521	Wood office furniture	1073.	522.	69.	242.	58.	0.
2522	Metal office furniture	1565.	2739.	0.	439.	238.	0.
2531	Public building and related furniture	218.	25.	105.	107.	115.	0.
2541	Wood partitions and fixtures	260.	68.	2.	658.	54.	0.
2542	Metal partitions and fixtures	83.	128.	160.	350.	1678.	0.
2591	Drapery hardware and blinds & shades	0.	1.	0.	306.	16.	0.
2599	Furniture and fixtures, nec	55.	889.	0.	205.	82.	0.
2621	Paper mills, except building paper	21896.	33197.	0.	31.	1869.	0.
2641	Paper coating and glazing	3092.	4365.	0.	826.	347.	0.
3131	Boot and shoe findings	0.	3.	0.	0.	0.	0.
3161	Luggage	0.	0.	0.	0.	0.	0.
3211	Flat glass	5056.	17678.	42623.	70259.	15165.	0.
3251	Brick and structural clay tile	15415.	379.	0.	0.	1087.	0.
3312	Blast furnaces and steel mills	12507.	4607.	3161.	11218.	63896.	0.
3351	Copper rolling and drawing	192.	3214.	1205.	12463.	273.	0.
3421	Cutlery	0.	0.	267.	525.	0.	0.
3423	Hand and edge tools, nec	140.	3.	0.	628.	23.	0.
3425	Hand saws and saw blades	55.	76.	0.	751.	0.	0.
3442	Metal doors, sash, and trim	781.	807.	0.	2943.	1327.	0.
3448	Prefabricated metal buildings	5811.	8891.	797.	1786.	8687.	0.
3523	Farm machinery and equipment	31427.	18748.	3195.	1551.	22378.	0.
3537	Industrial trucks and tractors	2042.	1421.	42.	396.	184.	0.
3552	Textile machinery	4.	616.	4876.	1030.	189.	0.
3565	Industrial patterns	83.	8.	1.	212.	0.	0.
3585	Refrigeration and heating equipment	34202.	21459.	444.	12093.	2659.	0.
3612	Transformers	2080.	8932.	0.	815.	2.	0.
3613	Switchgear and switchboard apparatus	932.	1063.	59.	5898.	894.	0.
3632	Household refrigerators and freezers	0.	0.	0.	0.	14.	0.
3651	Radio and TV communication equipment	53.	1.	0.	4.	0.	0.
3661	Telephone and telegraph apparatus	722.	254.	0.	1460.	296.	0.
3713	Truck and bus bodies	1168.	1245.	13.	661.	281.	0.
3714	Motor vehicle parts and accessories	33143.	14124.	14.	8133.	10021.	0.
3715	Truck trailers	0.	0.	0.	0.	241.	0.
3724	Aircraft engines and engine parts	539.	606.	69.	673.	22.	0.
3728	Aircraft equipment, nec	0.	1043.	113.	2211.	6.	0.
3731	Ship building and repairing	1.	68.	2188.	39.	1461.	0.
3732	Boat building and repairing	77.	557.	41.	0.	307.	0.
3792	Travel trailers and campers	0.	14.	0.	1.	170.	0.
3931	Musical instruments	222.	0.	0.	945.	450.	0.
3944	Games, toys, and children's vehicles	51.	0.	0.	10.	13.	0.
3949	Sporting and athletic goods, nec	0.	125.	0.	93.	20311.	0.
3991	Brooms and brushes	6.	44.	5.	149.	2.	0.
3993	Signs and advertising displays	12405.	1148.	11.	4220.	556.	0.
3995	Burial caskets	350.	0.	0.	0.	8.	0.
Total, sampled industries /2		194557.	176656.	60335.	148777.	175985.	0.

1/ Industry 2451--Mobile homes data not available by use
2/ Excludes industry 2451--Mobile homes

Table B-7.—Hardwood and softwood lumber used in selected manufacturing industries for jigs, models, patterns, and flasks, 1977
(Thousand board feet)

Industry number	Industry name	Jigs, models, patterns, and flasks	
		Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.
2431	Millwork	659.	105.
2434	Wood kitchen cabinets	2.	0.
2439	Structural wood members, nec	0.	85.
2441	Nailed wood boxes and shooks	60.	4.
2448	Wood pallets and skids	9.	7.
2449	Wood containers, nec	6.	3.
2451	Mobile homes /1	---	---
2452	Prefabricated wood buildings	0.	295.
2499	Wood products, nec	63.	107.
2511	Wood household furniture	190.	1717.
2512	Upholstered household furniture	66.	63.
2514	Metal household furniture	0.	0.
2515	Mattresses and bedsprings	0.	3.
2517	Wood television and radio cabinets	0.	1.
2519	Household furniture, nec	0.	0.
2521	Wood office furniture	7.	0.
2522	Metal office furniture	24.	0.
2531	Public building and related furniture	0.	0.
2541	Wood partitions and fixtures	8.	3.
2542	Metal partitions and fixtures	7.	28.
2591	Drapery hardware and blinds & shades	0.	0.
2599	Furniture and fixtures, nec	25.	0.
2621	Paper mills, except building paper	0.	0.
2641	Paper coating and glazing	0.	0.
3131	Boot and shoe findings	0.	0.
3161	Luggage	0.	0.
3211	Flat glass	0.	0.
3251	Brick and structural clay tile	0.	0.
3312	Blast furnaces and steel mills	12.	11.
3351	Copper rolling and drawing	0.	0.
3421	Cutlery	0.	0.
3423	Hand and edge tools, nec	0.	0.
3425	Hand saws and saw blades	0.	2.
3442	Metal doors, sash, and trim	1.	0.
3448	Prefabricated metal buildings	19.	69.
3523	Farm machinery and equipment	1119.	25.
3537	Industrial trucks and tractors	0.	0.
3552	Textile machinery	0.	2.
3565	Industrial patterns	290.	712.
3585	Refrigeration and heating equipment	105.	39.
3612	Transformers	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.
3632	Household refrigerators and freezers	0.	0.
3651	Radio and TV communication equipment	802.	0.
3661	Telephone and telegraph apparatus	0.	0.
3713	Truck and bus bodies	0.	0.
3714	Motor vehicle parts and accessories	10.	419.
3715	Truck trailers	0.	0.
3724	Aircraft engines and engine parts	9.	57.
3728	Aircraft equipment, nec	7.	6.
3731	Ship building and repairing	0.	109.
3732	Boat building and repairing	28.	221.
3792	Travel trailers and campers	6.	111.
3931	Musical instruments	376.	1.
3944	Games, toys, and children's vehicles	3.	49.
3949	Sporting and athletic goods, nec	1.	5.
3991	Brooms and brushes	1.	0.
3993	Signs and advertising displays	973.	70.
3995	Burial caskets	0.	0.
Total, sampled industries /2		4881.	4329.

1/ Industry 2451--Mobile homes data not available by use
2/ Excludes Industry 2451--Mobile homes

Table B-8.—Bolts used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand board feet)

Industry number	Industry name	Industry total	Products made for sale	Products made for own use-----					
				Total, own use	Jigs, models, patterns & flasks	-----Packaging and shipping-----			
						Total	Pallets	Containers	Dunnage, blocking & bracing
2429	Special product sawmills, nec	394940.	394940.	0.	0.	0.	0.	0.	0.
2431	Millwork	0.	0.	0.	0.	0.	0.	0.	0.
2434	Wood kitchen cabinets	5578.	5578.	0.	0.	0.	0.	0.	0.
2439	Structural wood members, nec	0.	0.	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	2488.	2488.	0.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	12198.	12198.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	81123.	81123.	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	0.	0.	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	0.	0.	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	301094.	301094.	0.	0.	0.	0.	0.	0.
2511	Wood household furniture	0.	0.	0.	0.	0.	0.	0.	0.
2512	Upholstered household furniture	0.	0.	0.	0.	0.	0.	0.	0.
2514	Metal household furniture	0.	0.	0.	0.	0.	0.	0.	0.
2515	Mattresses and bedsprings	0.	0.	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	0.	0.	0.	0.	0.	0.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	0.	0.	0.	0.	0.	0.	0.	0.
2522	Metal office furniture	0.	0.	0.	0.	0.	0.	0.	0.
2531	Public building and related furniture	0.	0.	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	0.	0.	0.	0.	0.	0.	0.	0.
2542	Metal partitions and fixtures	0.	0.	0.	0.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	0.	0.	0.	0.	0.	0.	0.	0.
2621	Paper mills, except building paper	0.	0.	0.	0.	0.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.	0.	0.
3161	Luggage	0.	0.	0.	0.	0.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	0.	0.	0.	0.	0.	0.	0.	0.
3351	Copper rolling and drawing	0.	0.	0.	0.	0.	0.	0.	0.
3421	Cutlery	0.	0.	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	5520.	5520.	0.	0.	0.	0.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	0.	0.	0.	0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	0.	0.	0.	0.	0.	0.	0.	0.
3523	Farm machinery and equipment	0.	0.	0.	0.	0.	0.	0.	0.
3537	Industrial trucks and tractors	0.	0.	0.	0.	0.	0.	0.	0.
3552	Textile machinery	0.	0.	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	0.	0.	0.	0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	0.	0.	0.	0.	0.	0.	0.	0.
3612	Transformers	0.	0.	0.	0.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3632	Household refrigerators and freezers	0.	0.	0.	0.	0.	0.	0.	0.
3651	Radio and TV communication equipment	0.	0.	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	814.	814.	0.	0.	0.	0.	0.	0.
3715	Truck trailers	97.	97.	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	0.	0.	0.	0.	0.	0.	0.	0.
3792	Travel trailers and campers	0.	0.	0.	0.	0.	0.	0.	0.
3931	Musical instruments	0.	0.	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	0.	0.	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	20722.	20722.	0.	0.	0.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	0.	0.	0.	0.	0.	0.	0.	0.
3995	Burial caskets	0.	0.	0.	0.	0.	0.	0.	0.
Total, sampled industries		824574.	824574.	0.	0.	0.	0.	0.	0.
Adjusted total, all industries		916193.	916193.	0.	0.	0.	0.	0.	0.

1/ Industry 2451--Mobile homes data not available by use

Table B-9.—Hardwood and softwood bolts used in selected manufacturing industries in products made for sale and for other uses, 1977
(Thousand board feet)

Industry number	Industry name	Industry total		Products made for sale		All other uses	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	145055.	249886.	145055.	249886.	0.	0.
2431	Millwork	0.	0.	0.	0.	0.	0.
2434	Wood kitchen cabinets	3707.	1871.	3707.	1871.	0.	0.
2439	Structural wood members, nec	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	961.	1528.	961.	1528.	0.	0.
2448	Wood pallets and skids	11729.	469.	11729.	469.	0.	0.
2449	Wood containers, nec	79002.	2121.	79002.	2121.	0.	0.
2451	Mobile homes 1/	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	209634.	91460.	209634.	91460.	0.	0.
2511	Wood household furniture	0.	0.	0.	0.	0.	0.
2512	Upholstered household furniture	0.	0.	0.	0.	0.	0.
2514	Metal household furniture	0.	0.	0.	0.	0.	0.
2515	Mattresses and bedsprings	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	0.	0.	0.	0.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	0.	0.	0.	0.	0.	0.
2522	Metal office furniture	0.	0.	0.	0.	0.	0.
2531	Public building and related furniture	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	0.	0.	0.	0.	0.	0.
2542	Metal partitions and fixtures	0.	0.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	0.	0.	0.	0.	0.	0.
2621	Paper mills, except building paper	0.	0.	0.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.
3161	Luggage	0.	0.	0.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	0.	0.	0.	0.	0.	0.
3351	Copper rolling and drawing	0.	0.	0.	0.	0.	0.
3421	Cutlery	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	5520.	0.	5520.	0.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	0.	0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	0.	0.	0.	0.	0.	0.
3523	Farm machinery and equipment	0.	0.	0.	0.	0.	0.
3537	Industrial trucks and tractors	0.	0.	0.	0.	0.	0.
3552	Textile machinery	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	0.	0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	0.	0.	0.	0.	0.	0.
3612	Transformers	0.	0.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.	0.	0.	0.	0.
3632	Household refrigerators and freezers	0.	0.	0.	0.	0.	0.
3651	Radio and TV communication equipment	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	0.	814.	0.	814.	0.	0.
3715	Truck trailers	97.	0.	97.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	0.	0.	0.	0.	0.	0.
3792	Travel trailers and campers	0.	0.	0.	0.	0.	0.
3931	Musical instruments	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	20722.	0.	20722.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	0.	0.	0.	0.	0.	0.
3995	Burial caskets	0.	0.	0.	0.	0.	0.
Total, sampled industries		476427.	348149.	476427.	348149.	0.	0.
Adjusted total, all industries		529363.	386832.				

1/ Industry 2451--Mobile homes data not available by use

Table B-10.—Plywood used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand square feet, 3/8-inch basis)

Industry number	Industry name	Industry total	Products made for sale	Products made for own use					Dunnage, blocking & bracing
				Total, own use	Jigs, models, patterns & flasks	Total	Pallets	Containers	
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.	0.	0.
2431	Millwork	234218.	229514.	4705.	7.	4698.	3003.	50.	1645.
2434	Wood kitchen cabinets	185646.	185612.	34.	9.	25.	25.	0.	0.
2439	Structural wood members, nec	100393.	100082.	311.	277.	34.	0.	12.	22.
2441	Nailed wood boxes and shook	30577.	30577.	0.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	108865.	108865.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	50517.	50517.	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	529070.	529070.						
2452	Prefabricated wood buildings	97775.	96360.	1415.	0.	1415.	0.	1415.	0.
2499	Wood products, nec	94311.	93711.	600.	537.	63.	0.	57.	6.
2511	Wood household furniture	143565.	143188.	377.	185.	192.	165.	0.	27.
2512	Upholstered household furniture	38166.	37576.	591.	86.	505.	500.	0.	5.
2514	Metal household furniture	7263.	7207.	56.	3.	53.	2.	51.	0.
2515	Mattresses and bedsprings	13586.	13586.	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	32278.	32269.	9.	9.	0.	0.	0.	0.
2519	Household furniture, nec	3893.	3893.	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	35831.	33238.	2594.	25.	2569.	2569.	0.	0.
2522	Metal office furniture	11364.	11243.	120.	0.	120.	0.	81.	39.
2531	Public building and related furniture	17973.	17361.	613.	0.	613.	0.	613.	0.
2541	Wood partitions and fixtures	224339.	224182.	157.	147.	10.	0.	10.	0.
2542	Metal partitions and fixtures	120530.	119392.	1138.	0.	1138.	1138.	0.	0.
2591	Drapery hardware and blinds & shades	14.	14.	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	12098.	12018.	81.	0.	81.	44.	36.	1.
2621	Paper mills, except building paper	152.	0.	153.	20.	133.	133.	0.	0.
2641	Paper coating and glazing	842.	0.	842.	0.	842.	842.	0.	0.
3131	Boot and shoe findings	445.	438.	6.	0.	6.	6.	0.	0.
3161	Luggage	44403.	44403.	1.	1.	0.	0.	0.	0.
3211	Flat glass	21.	0.	21.	21.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	225.	73.	153.	22.	131.	0.	17.	114.
3351	Copper rolling and drawing	302.	1.	302.	0.	302.	297.	5.	0.
3421	Cutlery	100.	75.	25.	0.	25.	0.	25.	0.
3423	Hand and edge tools, nec	474.	0.	473.	0.	473.	0.	473.	0.
3425	Hand saws and saw blades	97.	0.	97.	5.	92.	0.	92.	0.
3442	Metal doors, sash, and trim	1693.	831.	862.	0.	862.	245.	258.	359.
3448	Prefabricated metal buildings	78931.	74207.	4725.	86.	4639.	17.	0.	4622.
3523	Farm machinery and equipment	40691.	37840.	2852.	0.	2852.	240.	2612.	0.
3537	Industrial trucks and tractors	1674.	547.	1127.	0.	1127.	18.	1109.	0.
3552	Textile machinery	512.	102.	410.	6.	404.	261.	143.	0.
3565	Industrial patterns	3382.	3269.	114.	113.	1.	0.	1.	0.
3585	Refrigeration and heating equipment	6182.	4125.	2056.	32.	2024.	220.	1804.	0.
3612	Transformers	208.	174.	34.	20.	14.	5.	4.	5.
3613	Switchgear and switchboard apparatus	1455.	890.	565.	0.	565.	328.	237.	0.
3632	Household refrigerators and freezers	1607.	428.	1179.	0.	1179.	1179.	0.	0.
3651	Radio and TV communication equipment	1267.	1178.	89.	89.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	1820.	1459.	361.	0.	361.	361.	0.	0.
3713	Truck and bus bodies	9029.	7820.	1209.	0.	1209.	1105.	104.	0.
3714	Motor vehicle parts and accessories	10109.	1109.	9001.	439.	8562.	8413.	78.	71.
3715	Truck trailers	15295.	15295.	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	1249.	0.	1249.	223.	1026.	316.	710.	0.
3728	Aircraft equipment, nec	275.	61.	215.	4.	211.	0.	207.	4.
3731	Ship building and repairing	7924.	6313.	1611.	22.	1589.	57.	430.	1102.
3732	Boat building and repairing	151477.	151343.	134.	122.	12.	12.	0.	0.
3792	Travel trailers and campers	123898.	123553.	346.	44.	302.	164.	8.	130.
3931	Musical instruments	31717.	31693.	23.	0.	23.	0.	23.	0.
3944	Games, toys, and children's vehicles	20713.	20713.	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	16977.	16635.	343.	7.	336.	157.	179.	0.
3991	Brooms and brushes	680.	671.	9.	0.	9.	9.	0.	0.
3993	Signs and advertising displays	17064.	15042.	2024.	1063.	961.	188.	705.	68.
3995	Burial caskets	3398.	3276.	122.	0.	122.	0.	0.	122.
Total, sampled industries		2688560.	2643039.	45534.	3624.	41910.	22019.	11549.	8342.
Adjusted total, all industries		2987289.	2936710.	50593.	4027.	46567.	24466.	12832.	9269.

1/ Industry 2451--Mobile homes data not available by use

Table B-11.—Hardwood and softwood plywood used in selected manufacturing industries in products made for sale and for other uses, 1977
(Thousand square feet, 3/8-inch basis)

Industry number	Industry name	Industry total		Products made for sale		All other uses	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.
2431	Millwork	161213.	73005.	159551.	69963.	1662.	3043.
2434	Wood kitchen cabinets	137442.	48204.	137433.	48179.	9.	25.
2439	Structural wood members, nec	254.	100140.	232.	99850.	22.	289.
2441	Nailed wood boxes and shooks	3072.	27506.	3072.	27506.	0.	0.
2448	Wood pallets and skids	23272.	85593.	23272.	85593.	0.	0.
2449	Wood containers, nec	6847.	43670.	6847.	43670.	0.	0.
2451	Mobile homes /1	354560.	174510.	354560.	174510.	---	---
2452	Prefabricated wood buildings	668.	97107.	668.	95692.	0.	1415.
2499	Wood products, nec	24246.	70064.	24231.	69480.	16.	584.
2511	Wood household furniture	108757.	34808.	108449.	34738.	308.	70.
2512	Upholstered household furniture	15856.	22310.	15683.	21893.	173.	418.
2514	Metal household furniture	1026.	6237.	973.	6234.	53.	3.
2515	Mattresses and bedsprings	146.	13440.	146.	13440.	0.	0.
2517	Wood television and radio cabinets	14578.	17700.	14578.	17691.	0.	9.
2519	Household furniture, nec	103.	3791.	102.	3791.	0.	0.
2521	Wood office furniture	28447.	7384.	28423.	4815.	25.	2569.
2522	Metal office furniture	10371.	992.	10332.	911.	39.	81.
2531	Public building and related furniture	5985.	11989.	5985.	11376.	0.	613.
2541	Wood partitions and fixtures	42583.	181757.	42518.	181664.	64.	92.
2542	Metal partitions and fixtures	4696.	115834.	4665.	114727.	31.	1107.
2591	Drapery hardware and blinds & shades	0.	14.	0.	14.	0.	0.
2599	Furniture and fixtures, nec	3106.	8992.	3064.	8954.	43.	38.
2621	Paper mills, except building paper	152.	0.	0.	0.	153.	0.
2641	Paper coating and glazing	0.	842.	0.	0.	0.	842.
3131	Boot and shoe findings	411.	34.	411.	27.	0.	6.
3161	Luggage	4753.	39650.	4753.	39649.	0.	1.
3211	Flat glass	0.	21.	0.	0.	0.	21.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	203.	22.	72.	1.	131.	22.
3351	Copper rolling and drawing	0.	302.	0.	1.	0.	302.
3421	Cutlery	75.	25.	75.	0.	0.	25.
3423	Hand and edge tools, nec	55.	419.	0.	0.	55.	419.
3425	Hand saws and saw blades	44.	53.	0.	0.	44.	53.
3442	Metal doors, sash, and trim	365.	1328.	6.	825.	359.	503.
3448	Prefabricated metal buildings	4725.	74207.	86.	74121.	4639.	86.
3523	Farm machinery and equipment	968.	39723.	968.	36871.	0.	2852.
3537	Industrial trucks and tractors	1136.	538.	12.	535.	1124.	3.
3552	Textile machinery	240.	272.	96.	6.	144.	266.
3565	Industrial patterns	250.	3132.	159.	3110.	91.	23.
3585	Refrigeration and heating equipment	1437.	4744.	1025.	3100.	412.	1644.
3612	Transformers	8.	199.	0.	174.	9.	25.
3613	Switchgear and switchboard apparatus	1108.	347.	831.	60.	278.	287.
3632	Household refrigerators and freezers	1179.	428.	0.	428.	1179.	0.
3651	Radio and TV communication equipment	93.	1174.	4.	1174.	89.	0.
3661	Telephone and telegraph apparatus	1459.	361.	1459.	0.	0.	361.
3713	Truck and bus bodies	2906.	6123.	2703.	5118.	204.	1005.
3714	Motor vehicle parts and accessories	3394.	6714.	666.	443.	2729.	6271.
3715	Truck trailers	64.	15232.	64.	15232.	0.	0.
3724	Aircraft engines and engine parts	57.	1192.	0.	0.	57.	1192.
3728	Aircraft equipment, nec	44.	231.	37.	24.	8.	207.
3731	Ship building and repairing	3222.	4702.	2021.	4292.	1201.	410.
3732	Boat building and repairing	19725.	131752.	19616.	131727.	110.	24.
3792	Travel trailers and campers	38743.	85155.	38593.	84960.	151.	195.
3931	Musical instruments	28110.	3606.	28110.	3583.	0.	23.
3944	Games, toys, and children's vehicles	909.	1980.	909.	19805.	0.	0.
3949	Sporting and athletic goods, nec	757.	16219.	751.	15884.	7.	336.
3991	Brooms and brushes	667.	13.	667.	4.	0.	9.
3993	Signs and advertising displays	5574.	11490.	5475.	9567.	99.	1924.
3995	Burial caskets	317.	3081.	195.	3081.	122.	0.
Total, sampled industries		1070378.	1618183.	1054547.	1588493.	15640.	29693.
Adjusted total, all industries		1189309.	1797981.				

1/ Industry 2451--Mobile homes data not available by use

Table B-12.—Hardwood and softwood plywood used in selected manufacturing industries for packaging, shipping, and materials handling, 1977 (Thousand square feet, 3/8-inch basis)

Industry number	Industry name	Pallets		Containers		Dunnage	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.
2431	Millwork	9.	2994.	5.	45.	1645.	0.
2434	Wood kitchen cabinets	0.	25.	0.	0.	0.	0.
2439	Structural wood members, nec	0.	0.	0.	12.	22.	0.
2441	Nailed wood boxes and shooks	0.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	---	---	---	---	---	---
2452	Prefabricated wood buildings	0.	0.	0.	1415.	0.	0.
2499	Wood products, nec	0.	0.	2.	55.	6.	0.
2511	Wood household furniture	111.	54.	0.	0.	27.	0.
2512	Upholstered household furniture	112.	388.	0.	0.	5.	0.
2514	Metal household furniture	2.	0.	51.	0.	0.	0.
2515	Mattresses and bedsprings	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	0.	0.	0.	0.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	0.	2569.	0.	0.	0.	0.
2522	Metal office furniture	0.	0.	0.	81.	39.	0.
2531	Public building and related furniture	0.	0.	0.	613.	0.	0.
2541	Wood partitions and fixtures	0.	0.	0.	10.	0.	0.
2542	Metal partitions and fixtures	31.	1107.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	6.	38.	36.	0.	1.	0.
2621	Paper mills, except building paper	133.	0.	0.	0.	0.	0.
2641	Paper coating and glazing	0.	842.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	6.	0.	0.	0.	0.
3161	Luggage	0.	0.	0.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	0.	0.	17.	0.	114.	0.
3351	Copper rolling and drawing	0.	297.	0.	5.	0.	0.
3421	Cutlery	0.	0.	0.	25.	0.	0.
3423	Hand and edge tools, nec	0.	0.	55.	419.	0.	0.
3425	Hand saws and saw blades	0.	0.	39.	53.	0.	0.
3442	Metal doors, sash, and trim	0.	245.	0.	258.	359.	0.
3448	Prefabricated metal buildings	17.	0.	0.	0.	4622.	0.
3523	Farm machinery and equipment	0.	240.	0.	2612.	0.	0.
3537	Industrial trucks and tractors	15.	3.	1109.	0.	0.	0.
3552	Textile machinery	0.	261.	138.	5.	0.	0.
3565	Industrial patterns	0.	0.	1.	0.	0.	0.
3585	Refrigeration and heating equipment	0.	220.	412.	1392.	0.	0.
3612	Transformers	0.	5.	4.	0.	5.	0.
3613	Switchgear and switchboard apparatus	274.	54.	4.	233.	0.	0.
3632	Household refrigerators and freezers	1179.	0.	0.	0.	0.	0.
3651	Radio and TV communication equipment	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	361.	0.	0.	0.	0.
3713	Truck and bus bodies	204.	901.	0.	104.	0.	0.
3714	Motor vehicle parts and accessories	2559.	5854.	7.	76.	71.	0.
3715	Truck trailers	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	54.	263.	0.	716.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	207.	4.	0.
3731	Ship building and repairing	0.	57.	99.	131.	1161.	0.
3732	Boat building and repairing	12.	0.	0.	0.	0.	0.
3792	Travel trailers and campers	0.	164.	8.	0.	130.	0.
3931	Musical instruments	0.	0.	0.	23.	0.	0.
3944	Games, toys, and children's vehicles	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	0.	157.	0.	179.	0.	0.
3991	Brooms and brushes	0.	9.	0.	0.	0.	0.
3993	Signs and advertising displays	0.	188.	19.	686.	68.	0.
3995	Burial caskets	0.	0.	0.	0.	122.	0.
Total, sampled industries /2		4718.	17302.	2006.	9543.	8342.	0.

1/ Industry 2451--Mobile homes data not available by use
2/ Excludes industry 2451--Mobile homes

**Table B-13.—Hardwood and softwood plywood used in selected manufacturing industries for jigs, models, patterns, and flasks, 1977
(Thousand square feet, 3/8-inch basis)**

Industry number	Industry name	Jigs, models, patterns, and flasks	
		Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.
2431	Millwork	3.	4.
2434	Wood kitchen cabinets	9.	0.
2439	Structural wood members, nec	0.	277.
2441	Nailed wood boxes and shooks	0.	0.
2448	Wood pallets and skids	0.	0.
2449	Wood containers, nec	0.	0.
2451	Mobile homes /1	—	—
2452	Prefabricated wood buildings	0.	0.
2499	Wood products, nec	8.	529.
2511	Wood household furniture	170.	16.
2512	Upholstered household furniture	56.	30.
2514	Metal household furniture	0.	3.
2515	Mattresses and bedsprings	0.	0.
2517	Wood television and radio cabinets	0.	9.
2519	Household furniture, nec	0.	0.
2521	Wood office furniture	25.	0.
2522	Metal office furniture	0.	0.
2531	Public building and related furniture	0.	0.
2541	Wood partitions and fixtures	64.	82.
2542	Metal partitions and fixtures	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.
2599	Furniture and fixtures, nec	0.	0.
2621	Paper mills, except building paper	20.	0.
2641	Paper coating and glazing	0.	0.
3131	Boot and shoe findings	0.	0.
3161	Luggage	0.	1.
3211	Flat glass	0.	21.
3251	Brick and structural clay tile	0.	0.
3312	Blast furnaces and steel mills	0.	22.
3351	Copper rolling and drawing	0.	0.
3421	Cutlery	0.	0.
3423	Hand and edge tools, nec	0.	0.
3425	Hand saws and saw blades	5.	0.
3442	Metal doors, sash, and trim	0.	0.
3448	Prefabricated metal buildings	0.	86.
3523	Farm machinery and equipment	0.	0.
3537	Industrial trucks and tractors	0.	0.
3552	Textile machinery	6.	0.
3565	Industrial patterns	90.	21.
3585	Refrigeration and heating equipment	0.	32.
3612	Transformers	0.	20.
3613	Switchgear and switchboard apparatus	0.	0.
3632	Household refrigerators and freezers	0.	0.
3651	Radio and TV communication equipment	89.	0.
3661	Telephone and telegraph apparatus	0.	0.
3713	Truck and bus bodies	0.	0.
3714	Motor vehicle parts and accessories	92.	347.
3715	Truck trailers	0.	0.
3724	Aircraft engines and engine parts	3.	219.
3728	Aircraft equipment, nec	4.	0.
3731	Ship building and repairing	0.	22.
3732	Boat building and repairing	98.	24.
3792	Travel trailers and campers	13.	31.
3911	Musical instruments	0.	0.
3944	Games, toys, and children's vehicles	0.	0.
3949	Sporting and athletic goods, nec	7.	0.
3991	Brooms and brushes	0.	0.
3993	Signs and advertising displays	12.	1050.
3995	Burlap baskets	0.	0.
Total, sampled industries /2		774.	2848.

1. Industry 2451—Mobile homes data not available by use
2. Excludes industry 2451—Mobile homes

**Table B-14.—Veneer used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand square feet, 3/8-inch basis)**

Industry number	Industry name	Industry total	Products made for sale	Total, own use	Jigs, models, patterns & flasks	Products made for own use			
						Total	Pallets	Other	Un- classified
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.	0.	0.
2431	Millwork	306814.	306167.	648.	62.	586.	12.	40.	0.
2434	Wood kitchen cabinets	22656.	22654.	2.	2.	0.	0.	0.	0.
2439	Structural wood members, nec	53.	14.	39.	39.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	8722.	7445.	1277.	0.	1277.	0.	0.	0.
2446	Wood pallets and skids	0.	0.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	67756.	67756.	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	0.	0.	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	713.	713.	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	10712.	10712.	0.	0.	0.	0.	0.	0.
2511	Wood household furniture	242397.	202734.	38163.	24.	38143.	1177.	0.	0.
2512	Upholstered household furniture	13367.	16823.	2544.	0.	2544.	0.	0.	0.
2514	Metal household furniture	3073.	3065.	8.	4.	0.	0.	0.	0.
2515	Mattresses and bedsprings	37.	37.	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	29273.	28813.	460.	45.	414.	44.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	26007.	25561.	445.	0.	445.	44.	0.	0.
2522	Metal office furniture	1256.	487.	768.	0.	768.	0.	0.	0.
2531	Public building and related furniture	12737.	12737.	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	21019.	21013.	6.	6.	0.	0.	0.	0.
2542	Metal partitions and fixtures	239.	108.	130.	19.	111.	0.	0.	0.
2591	Drapery hardware and blinds & shades	8187.	8187.	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	1871.	1722.	148.	28.	120.	27.	0.	0.
2621	Paper mills, except building paper	1245.	0.	1245.	0.	1245.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.	0.	0.
3161	Luggage	1087.	56.	1031.	0.	1031.	0.	0.	0.
3211	Plate glass	0.	0.	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	17403.	4029.	13374.	0.	13374.	0.	0.	0.
3312	Blast furnaces and steel mills	985.	0.	985.	0.	985.	0.	0.	0.
3351	Copper rolling and drawing	225.	0.	225.	0.	225.	0.	0.	0.
3421	Cutlery	549.	549.	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	32.	0.	32.	0.	32.	29.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	36.	36.	0.	0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	497.	497.	0.	0.	0.	0.	0.	0.
3523	Farm machinery and equipment	235.	0.	234.	94.	140.	139.	0.	0.
3537	Industrial trucks and tractors	2124.	1504.	621.	0.	621.	0.	0.	0.
3552	Textile machinery	99.	97.	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	874.	0.	874.	874.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	128.	6.	122.	0.	122.	110.	12.	0.
3612	Transformers	11.	0.	11.	1.	10.	10.	0.	0.
3613	Switchgear and switchboard apparatus	3387.	2.	3385.	48.	3337.	0.	3337.	0.
3612	Household refrigerators and freezers	85150.	48.	85102.	54.	85048.	85048.	0.	0.
3651	Radio and TV communication equipment	19066.	19066.	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	642.	80.	562.	0.	562.	562.	0.	0.
3715	Truck trailers	0.	0.	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	697.	654.	43.	0.	43.	0.	40.	0.
3792	Travel trailers and campers	29744.	29738.	6.	0.	0.	0.	0.	0.
3931	Musical instruments	24159.	24159.	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	48.	48.	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	1330.	1330.	0.	0.	0.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.	0.	0.
3994	Signs and advertising displays	1303.	515.	788.	788.	0.	0.	0.	0.
3995	Burlap baskets	0.	0.	0.	0.	0.	0.	0.	0.
Total, sampled industries		972444.	419162.	153279.	2673.	151096.	11764.	4064.	0.
Adjusted total, all industries		1730493.	910180.	170310.	2103.	168717.	141744.	0.	0.

/1 Industry 2451—Mobile homes. Data not available by use.

**Table B-15.—Hardwood and softwood veneer used in selected manufacturing industries in products made for sale and for other uses, 1977
(Thousand square feet, 3/8-inch basis)**

Industry number	Industry name	Industry total		Products made for sale		All other uses	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.
2431	Millwork	187449.	119366.	186841.	119326.	608.	44.
2434	Wood kitchen cabinets	17842.	4814.	17842.	4814.	0.	0.
2439	Structural wood members, nec	53.	0.	14.	0.	39.	0.
2441	Nailed wood boxes and shooks	3014.	570.	1732.	570.	1282.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	65010.	2746.	65010.	2746.	0.	0.
2451	Mobile homes /1	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	274.	439.	274.	439.	0.	0.
2499	Wood products, nec	8946.	1766.	8946.	1766.	0.	0.
2511	Wood household furniture	221188.	19739.	183225.	19509.	37964.	230.
2512	Upholstered household furniture	16867.	2500.	14322.	2500.	2544.	0.
2514	Metal household furniture	3073.	0.	3065.	0.	8.	0.
2515	Mattresses and bedsprings	37.	0.	37.	0.	0.	0.
2517	Wood television and radio cabinets	29059.	214.	28627.	166.	432.	28.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	25964.	42.	25519.	42.	445.	0.
2522	Metal office furniture	641.	615.	28.	454.	612.	161.
2531	Public building and related furniture	12737.	0.	12737.	0.	0.	0.
2541	Wood partitions and fixtures	2691.	18329.	2691.	18329.	0.	0.
2542	Metal partitions and fixtures	239.	0.	108.	0.	130.	0.
2591	Drapery hardware and blinds & shades	8068.	119.	8068.	119.	0.	0.
2599	Furniture and fixtures, nec	1871.	0.	1722.	0.	148.	0.
2621	Paper mills, except building paper	135.	1110.	0.	0.	135.	1110.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.
3161	Luggage	1084.	3.	53.	3.	1031.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	17403.	0.	4029.	0.	13374.	0.
3312	Blast furnaces and steel mills	985.	0.	0.	0.	985.	0.
3351	Copper rolling and drawing	0.	225.	0.	0.	0.	225.
3421	Cutlery	499.	50.	499.	50.	0.	0.
3423	Hand and edge tools, nec	0.	0.	0.	0.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	36.	0.	36.	0.	0.	0.
3448	Prefabricated metal buildings	0.	497.	0.	497.	0.	0.
3523	Farm machinery and equipment	71.	164.	0.	0.	71.	164.
3537	Industrial trucks and tractors	2016.	108.	1504.	0.	513.	108.
3552	Textile machinery	98.	0.	97.	0.	0.	0.
3565	Industrial patterns	569.	305.	0.	0.	569.	305.
3585	Refrigeration and heating equipment	128.	0.	6.	0.	122.	0.
3612	Transformers	11.	0.	0.	0.	11.	0.
3613	Switchgear and switchboard apparatus	3306.	81.	2.	0.	3304.	81.
3632	Household refrigerators and freezers	863.	84288.	0.	48.	863.	84239.
3651	Radio and TV communication equipment	17962.	1104.	17962.	1104.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	562.	80.	0.	80.	562.	0.
3715	Truck trailers	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	43.	654.	0.	654.	43.	0.
3792	Travel trailers and campers	5022.	24723.	5015.	24723.	7.	0.
3931	Musical instruments	23184.	976.	23184.	976.	0.	0.
3944	Games, toys, and children's vehicles	0.	48.	0.	48.	0.	0.
3949	Sporting and athletic goods, nec	1138.	192.	1138.	192.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	226.	500.	224.	499.	2.	1.
3995	Burial caskets	0.	0.	0.	0.	0.	0.
Total, sampled industries		680864.	29156.	614661.	24424.	66200.	4732.
Adjusted total, all industries		156716.	22347.				

1/ Industry 2451--Mobile homes data not available by use.

Table B-16.—Hardwood and softwood veneer used in selected manufacturing industries for packaging, shipping, and materials handling, 1977
(Thousand square feet, 3/8-inch basis)

Industry number	Industry name	Pallets		Containers		Luggage	
		Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.
2431	Millwork	12.	0.	47.	0.	527.	0.
2434	Wood kitchen cabinets	0.	0.	0.	0.	0.	0.
2439	Structural wood members, nec	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	1277.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	---	---	---	---	---	---
2452	Prefabricated wood buildings	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	0.	0.	0.	0.	0.	0.
2511	Wood household furniture	32087.	191.	11.	0.	5852.	0.
2512	Upholstered household furniture	2544.	0.	0.	0.	0.	0.
2514	Metal household furniture	0.	0.	0.	0.	0.	0.
2515	Mattresses and bedsprings	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	386.	28.	0.	0.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	445.	0.	0.	0.	0.	0.
2522	Metal office furniture	65.	156.	0.	0.	547.	0.
2531	Public building and related furniture	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	0.	0.	0.	0.	0.	0.
2542	Metal partitions and fixtures	0.	0.	0.	0.	111.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	27.	0.	85.	0.	8.	0.
2621	Paper mills, except building paper	135.	1110.	0.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.
3161	Luggage	0.	0.	1031.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	2328.	0.	0.	0.	11046.	0.
3312	Blast furnaces and steel mills	72.	0.	0.	0.	913.	0.
3351	Copper rolling and drawing	0.	225.	0.	0.	0.	0.
3421	Cutlery	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	0.	29.	0.	3.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	0.	0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	0.	0.	0.	0.	0.	0.
3523	Farm machinery and equipment	70.	70.	0.	0.	1.	0.
3537	Industrial trucks and tractors	513.	108.	0.	0.	0.	0.
3552	Textile machinery	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	0.	0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	110.	0.	12.	0.	0.	0.
3612	Transformers	10.	0.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.	3304.	33.	0.	0.
3632	Household refrigerators and freezers	809.	84239.	0.	0.	0.	0.
3651	Radio and TV communication equipment	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	562.	0.	0.	0.	0.	0.
3715	Truck trailers	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	0.	0.	43.	0.	0.	0.
3792	Travel trailers and campers	0.	0.	0.	0.	0.	0.
3931	Musical instruments	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	0.	0.	0.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	0.	0.	0.	0.	45.	0.
3995	Burial caskets	0.	0.	0.	0.	0.	0.
Total, sampled industries /2		41452.	86156.	4533.	38.	19041.	0.

1/ Industry 2451--Mobile homes data not available; use

2/ Excludes industry 2451--Mobile homes

**Table B-17.—Hardwood and softwood veneer used in selected manufacturing industries for jigs, models, patterns, and flasks, 1977
(Thousand square feet, 3/8-inch basis)**

Industry number	Industry name	Jigs, models, patterns, and flasks	
		Hardwood	Softwood
2429	Special product sawmills, nec	0.	0.
2431	Millwork	22.	39.
2434	Wood kitchen cabinets	2.	0.
2439	Structural wood members, nec	39.	0.
2441	Nailed wood boxes and shooks	0.	0.
2448	Wood pallets and skids	0.	0.
2449	Wood containers, nec	0.	0.
2451	Mobile homes ¹	---	---
2452	Prefabricated wood buildings	0.	0.
2499	Wood products, nec	0.	0.
2511	Wood household furniture	14.	9.
2512	Upholstered household furniture	0.	0.
2514	Metal household furniture	8.	0.
2515	Mattresses and bedsprings	0.	0.
2517	Wood television and radio cabinets	46.	0.
2519	Household furniture, nec	0.	0.
2521	Wood office furniture	0.	0.
2522	Metal office furniture	0.	0.
2531	Public building and related furniture	0.	0.
2541	Wood partitions and fixtures	0.	6.
2542	Metal partitions and fixtures	19.	0.
2591	Drapery hardware and blinds & shades	0.	0.
2599	Furniture and fixtures, nec	28.	0.
2621	Paper mills, except building paper	0.	0.
2641	Paper coating and glazing	0.	0.
3111	Foot and shoe findings	0.	0.
3161	Luggage	0.	0.
3211	Flat glass	0.	0.
3251	Brick and structural clay tile	0.	0.
3312	Blast furnaces and steel mills	0.	0.
3361	Copper rolling and drawing	0.	0.
3401	Cutlery	0.	0.
3423	Hand and edge tools, nec	0.	0.
3425	Hand saws and saw blades	0.	0.
3442	Metal doors, sash, and trim	0.	0.
3444	Prefabricated metal buildings	0.	0.
3523	Farm machinery and equipment	0.	94.
3531	Industrial trucks and tractors	0.	0.
3552	Textile machinery	0.	0.
3561	Industrial patterns	569.	305.
3587	Refrigeration and heating equipment	0.	0.
3612	Transformers	1.	0.
3613	Switchgear and switchboard apparatus	0.	48.
3632	Household refrigerators and freezers	54.	0.
3641	Radio and TV communication equipment	0.	0.
3651	Telephone and telegraph apparatus	0.	0.
3711	Truck and bus bodies	0.	0.
3724	Motor vehicle parts and accessories	0.	0.
3731	Truck trailers	0.	0.
3734	Aircraft engines and engine parts	0.	0.
3735	Aircraft equipment, nec	0.	0.
3741	Ship building and repairing	0.	0.
3742	Boat building and repairing	0.	0.
3751	Travel trailers and campers	7.	0.
3752	Motor vehicles	0.	0.
3753	Automobiles, trucks, and children's vehicles	0.	0.
3754	Motorcycles and athletic goods, nec	0.	0.
3755	Trucks and trailers	0.	0.
3756	Trucks and advertising displays	376.	386.
3757	Trucks and trailers	0.	0.
3758	Trucks and trailers	0.	0.
3759	Trucks and trailers	0.	0.
3760	Trucks and trailers	0.	0.
3761	Trucks and trailers	0.	0.
3762	Trucks and trailers	0.	0.
3763	Trucks and trailers	0.	0.
3764	Trucks and trailers	0.	0.
3765	Trucks and trailers	0.	0.
3766	Trucks and trailers	0.	0.
3767	Trucks and trailers	0.	0.
3768	Trucks and trailers	0.	0.
3769	Trucks and trailers	0.	0.
3770	Trucks and trailers	0.	0.
3771	Trucks and trailers	0.	0.
3772	Trucks and trailers	0.	0.
3773	Trucks and trailers	0.	0.
3774	Trucks and trailers	0.	0.
3775	Trucks and trailers	0.	0.
3776	Trucks and trailers	0.	0.
3777	Trucks and trailers	0.	0.
3778	Trucks and trailers	0.	0.
3779	Trucks and trailers	0.	0.
3780	Trucks and trailers	0.	0.
3781	Trucks and trailers	0.	0.
3782	Trucks and trailers	0.	0.
3783	Trucks and trailers	0.	0.
3784	Trucks and trailers	0.	0.
3785	Trucks and trailers	0.	0.
3786	Trucks and trailers	0.	0.
3787	Trucks and trailers	0.	0.
3788	Trucks and trailers	0.	0.
3789	Trucks and trailers	0.	0.
3790	Trucks and trailers	0.	0.
3791	Trucks and trailers	0.	0.
3792	Trucks and trailers	0.	0.
3793	Trucks and trailers	0.	0.
3794	Trucks and trailers	0.	0.
3795	Trucks and trailers	0.	0.
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3799	Trucks and trailers	0.	0.
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3801	Trucks and trailers	0.	0.
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3808	Trucks and trailers	0.	0.
3809	Trucks and trailers	0.	0.
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3897	Trucks and trailers	0.	0.
3898	Trucks and trailers	0.	0.
3899	Trucks and trailers	0.	0.
3900	Trucks and trailers	0.	0.
3901	Trucks and trailers	0.	0.
3902	Trucks and trailers	0.	0.
3903	Trucks and trailers	0.	0.
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3986	Trucks and trailers	0.	0.
3987	Trucks and trailers	0.	0.
3988	Trucks and trailers	0.	0.
3989	Trucks and trailers	0.	0.
3990	Trucks and trailers	0.	0.
3991	Trucks and trailers	0.	0.
3992	Trucks and trailers	0.	0.
3993	Trucks and trailers	0.	0.
3994	Trucks and trailers	0.	0.
3995	Trucks and trailers	0.	0.
3996	Trucks and trailers	0.	0.
3997	Trucks and trailers	0.	0.
3998	Trucks and trailers	0.	0.
3999	Trucks and trailers	0.	0.
4000	Trucks and trailers	0.	0.
4001	Trucks and trailers	0.	0.
4002	Trucks and trailers	0.	0.
4003	Trucks and trailers	0.	0.
4004	Trucks and trailers	0.	0.
4005	Trucks and trailers	0.	0.
4006	Trucks and trailers	0.	0.
4007	Trucks and trailers	0.	0.
4008	Trucks and trailers	0.	0.
4009	Trucks and trailers	0.	0.
4010	Trucks and trailers	0.	0.
4011	Trucks and trailers	0.	0.
4012	Trucks and trailers	0.	0.
4013	Trucks and trailers	0.	0.
4014	Trucks and trailers	0.	0.
4015	Trucks and trailers	0.	0.
4016	Trucks and trailers	0.	0.
4017	Trucks and trailers	0.	0.
4018	Trucks and trailers	0.	0.
4019	Trucks and trailers	0.	0.
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4031	Trucks and trailers	0.	0.
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4034	Trucks and trailers	0.	0.
4035	Trucks and trailers	0.	0.
4036	Trucks and trailers	0.	0.
4037	Trucks and trailers	0.	0.
4038	Trucks and trailers	0.	0.
4039	Trucks and trailers	0.	0.
4040	Trucks and trailers	0.	0.
4041	Trucks and trailers	0.	0.
4042	Trucks and trailers	0.	0.
4043	Trucks and		

Table B-18.—Hardboard used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand square feet, 1/8-inch basis)

Industry number	Industry name	Industry total	Products made for sale	Total, own use	Jigs, models, patterns & flasks	Products made for own use----- -----Packaging and shipping-----			Dunnage, blocking & bracing
						Total	Pallets	Containers	
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.	0.	0.
2431	Millwork	350349.	350345.	4.	0.	4.	0.	0.	4.
2434	Wood kitchen cabinets	99284.	98506.	778.	0.	778.	0.	0.	778.
2439	Structural wood members, nec	186.	186.	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	18328.	18328.	0.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	65825.	65825.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	2623.	2623.	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	134345.	134345.	---	---	---	---	---	---
2452	Prefabricated wood buildings	21954.	21954.	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	102254.	102252.	2.	0.	2.	0.	2.	0.
2511	Wood household furniture	186459.	186459.	0.	0.	0.	0.	0.	0.
2512	Upholstered household furniture	32396.	11240.	21156.	0.	21156.	21156.	0.	0.
2514	Metal household furniture	22489.	22487.	2.	2.	0.	0.	0.	0.
2515	Mattresses and bedsprings	146.	146.	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	15013.	15013.	0.	0.	0.	0.	0.	0.
2519	Household furniture, nec	549.	523.	25.	0.	25.	1.	24.	0.
2521	Wood office furniture	24305.	24305.	0.	0.	0.	0.	0.	0.
2522	Metal office furniture	447.	447.	0.	0.	0.	0.	0.	0.
2531	Public building and related furniture	1575.	1575.	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	140490.	140310.	180.	13.	167.	0.	167.	0.
2542	Metal partitions and fixtures	9958.	9958.	0.	0.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	1826.	1823.	4.	2.	2.	0.	2.	0.
2621	Paper mills, except building paper	2246.	0.	2246.	0.	2246.	2246.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.	0.	0.
3161	Luggage	1402.	1400.	2.	2.	0.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	1115.	0.	1114.	0.	1114.	91.	0.	1023.
3351	Copper rolling and drawing	0.	0.	0.	0.	0.	0.	0.	0.
3421	Cutlery	0.	0.	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	88.	58.	30.	0.	30.	0.	30.	0.
3425	Hand saws and saw blades	116.	0.	115.	46.	69.	0.	69.	0.
3442	Metal doors, sash, and trim	35287.	35273.	14.	0.	14.	0.	0.	14.
3448	Prefabricated metal buildings	18659.	8995.	9664.	0.	9664.	0.	0.	9664.
3523	Farm machinery and equipment	0.	0.	0.	0.	0.	0.	0.	0.
3537	Industrial trucks and tractors	126.	126.	0.	0.	0.	0.	0.	0.
3552	Textile machinery	286.	286.	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	15.	15.	0.	0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	1929.	1863.	66.	0.	66.	42.	24.	0.
3612	Transformers	2096.	2072.	25.	25.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3632	Household refrigerators and freezers	207229.	202175.	5054.	0.	5054.	5054.	0.	0.
3651	Radio and TV communication equipment	351419.	351419.	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	4301.	4174.	127.	99.	28.	0.	28.	0.
3715	Truck trailers	87.	87.	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	42.	0.	42.	0.	42.	42.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	97.	97.	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	372.	372.	0.	0.	0.	0.	0.	0.
3792	Travel trailers and campers	1040.	991.	49.	0.	49.	0.	0.	49.
3911	Musical instruments	2894.	2894.	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	5227.	5227.	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	4455.	4455.	0.	0.	0.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	12329.	12136.	194.	187.	7.	0.	7.	0.
3995	Burial baskets	195.	195.	0.	0.	0.	0.	0.	0.
Total, sampled industries		1883853.	1842960.	40893.	376.	40517.	28632.	353.	11532.
Adjusted total, all industries		2093170.	2047733.	45437.	418.	45019.	31813.	692.	12813.

1/ Industry 2451. Mobile homes data not available by use

Table B-19.—Insulation board used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand square feet, 1/2-inch basis)

Industry number	Industry name	Industry total	Products made for sale	Products made for own use		Jigs, models, patterns & flasks	Packaging and shipping			Dunnage, blocking & bracing
				Total, own use	Total, own use		Total	Pallets	Containers	
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.	0.	0.	0.
2431	Millwork	4784.	4784.	0.	0.	0.	0.	0.	0.	0.
2434	Wood kitchen cabinets	106.	106.	0.	0.	0.	0.	0.	0.	0.
2439	Structural wood members, nec	593.	593.	0.	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	31.	31.	0.	0.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	0.	0.	0.	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	263150.	263150.	0.	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	13941.	13941.	0.	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	311.	311.	0.	0.	0.	0.	0.	0.	0.
2511	Wood household furniture	0.	0.	0.	0.	0.	0.	0.	0.	0.
2512	Upholstered household furniture	181996.	181996.	0.	0.	0.	0.	0.	0.	0.
2514	Metal household furniture	0.	0.	0.	0.	0.	0.	0.	0.	0.
2515	Mattresses and bedsprings	0.	0.	0.	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	0.	0.	0.	0.	0.	0.	0.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	0.	0.	0.	0.	0.	0.	0.	0.	0.
2522	Metal office furniture	8663.	8663.	0.	0.	0.	0.	0.	0.	0.
2531	Public building and related furniture	469.	469.	0.	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	185047.	185047.	0.	0.	0.	0.	0.	0.	0.
2542	Metal partitions and fixtures	0.	0.	0.	0.	0.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	157.	157.	0.	0.	0.	0.	0.	0.	0.
2621	Paper mills, except building paper	0.	0.	0.	0.	0.	0.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	0.	0.	0.	0.	0.	0.
3161	Luggage	0.	0.	0.	0.	0.	0.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	0.	0.	0.	0.	0.	0.	0.	0.	0.
3351	Copper rolling and drawing	0.	0.	0.	0.	0.	0.	0.	0.	0.
3421	Cutlery	0.	0.	0.	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	0.	0.	0.	0.	0.	0.	0.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	0.	0.	0.	0.	0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	221.	221.	0.	0.	0.	0.	0.	0.	0.
3523	Farm machinery and equipment	0.	0.	0.	0.	0.	0.	0.	0.	0.
3537	Industrial trucks and tractors	0.	0.	0.	0.	0.	0.	0.	0.	0.
3552	Textile machinery	0.	0.	0.	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	0.	0.	0.	0.	0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	72.	72.	0.	0.	0.	0.	0.	0.	0.
3612	Transformers	277.	277.	0.	0.	0.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.	0.	0.	0.	0.	0.	0.	0.
3632	Household refrigerators and freezers	0.	0.	0.	0.	0.	0.	0.	0.	0.
3651	Radio and TV communication equipment	0.	0.	0.	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	0.	0.	0.	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	0.	0.	0.	0.	0.	0.	0.	0.	0.
3715	Truck trailers	0.	0.	0.	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	59.	59.	0.	0.	0.	0.	0.	0.	0.
3792	Travel trailers and campers	688.	688.	0.	0.	0.	0.	0.	0.	0.
3931	Musical instruments	87.	87.	0.	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	0.	0.	0.	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	0.	0.	0.	0.	0.	0.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	7.	7.	0.	0.	0.	0.	0.	0.	0.
3995	Burial caskets	79.	79.	0.	0.	0.	0.	0.	0.	0.
	Total, sampled industries	660738.	660733.	0.	0.	0.	0.	0.	0.	0.
	Adjusted total, all industries	734153.	734153.	0.	0.	0.	0.	0.	0.	0.

1/ Industry 2451--Mobile homes data not available by use

Table B-20.—Particleboard used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand square feet, 3/4-inch basis)

Industry number	Industry name	Industry total	Products made for sale	Products made for own use		Jigs, models, patterns & flasks	Packaging and shipping			Dunnage, blocking & bracing
				Total, own use			Total	Pallets	Containers	
2429	Special product sawmills, nec	0.	0.	0.		0.	0.	0.	0.	0.
2431	Millwork	174880.	174796.	85.		4.	81.	40.	0.	41.
2434	Wood kitchen cabinets	236673.	236673.	0.		0.	0.	0.	0.	0.
2439	Structural wood members, nec	683.	683.	0.		0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	2779.	2779.	0.		0.	0.	0.	0.	0.
2448	Wood pallets and skids	2734.	2734.	0.		0.	0.	0.	0.	0.
2449	Wood containers, nec	1623.	1534.	89.		0.	89.	0.	89.	0.
2451	Mobile homes /1	278385.	278385.							
2452	Prefabricated wood buildings	28385.	28385.	0.		0.	0.	0.	0.	0.
2499	Wood products, nec	91811.	91810.	1.		1.	0.	0.	0.	0.
2511	Wood household furniture	245658.	245643.	15.		15.	0.	0.	0.	0.
2512	Upholstered household furniture	13024.	12996.	28.		0.	28.	28.	0.	0.
2514	Metal household furniture	23166.	23165.	0.		0.	0.	0.	0.	0.
2515	Mattresses and bedsprings	145.	145.	0.		0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	87767.	87767.	0.		0.	0.	0.	0.	0.
2519	Household furniture, nec	5993.	5992.	1.		1.	0.	0.	0.	0.
2521	Wood office furniture	33665.	33665.	0.		0.	0.	0.	0.	0.
2522	Metal office furniture	47287.	47287.	0.		0.	0.	0.	0.	0.
2531	Public building and related furniture	74685.	74509.	176.		3.	173.	23.	119.	31.
2541	Wood partitions and fixtures	154201.	154168.	34.		34.	0.	0.	0.	0.
2542	Metal partitions and fixtures	146506.	146506.	0.		0.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	966.	954.	9.		0.	9.	0.	0.	9.
2599	Furniture and fixtures, nec	36380.	36184.	196.		0.	196.	196.	0.	0.
2621	Paper mills, except building paper	3.	0.	3.		0.	3.	3.	0.	0.
2641	Paper coating and glazing	0.	0.	0.		0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.		0.	0.	0.	0.	0.
3161	Luggage	3565.	3565.	0.		0.	0.	0.	0.	0.
3211	Flat glass	325.	0.	325.		0.	325.	325.	0.	0.
3251	Brick and structural clay tile	43.	0.	43.		0.	43.	43.	0.	0.
3312	Blast furnaces and steel mills	0.	0.	0.		0.	0.	0.	0.	0.
3351	Copper rolling and drawing	530.	301.	229.		0.	229.	229.	0.	0.
3421	Cutlery	0.	0.	0.		0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	6.	6.	0.		0.	0.	0.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.		0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	1006.	1006.	0.		0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	2550.	2051.	499.		0.	499.	0.	499.	0.
3523	Farm machinery and equipment	0.	0.	0.		0.	0.	0.	0.	0.
3537	Industrial trucks and tractors	0.	0.	0.		0.	0.	0.	0.	0.
3552	Textile machinery	56.	56.	1.		0.	1.	0.	1.	0.
3565	Industrial patterns	83.	83.	0.		0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	1191.	1153.	38.		0.	38.	38.	0.	0.
3612	Transformers	456.	456.	0.		0.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	1.	0.	1.		0.	1.	1.	0.	0.
3632	Household refrigerators and freezers	9.	4.	4.		0.	4.	4.	0.	0.
3651	Radio and TV communication equipment	819984.	819984.	0.		0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.		0.	0.	0.	0.	0.
3713	Truck and bus bodies	26.	26.	0.		0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	48.	42.	6.		6.	0.	0.	0.	0.
3715	Truck trailers	0.	0.	0.		0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	8.	0.	8.		0.	8.	7.	1.	0.
3728	Aircraft equipment, nec	2.	0.	2.		2.	0.	0.	0.	0.
3731	Ship building and repairing	85.	85.	0.		0.	0.	0.	0.	0.
3732	Boat building and repairing	70.	70.	0.		0.	0.	0.	0.	0.
3792	Travel trailers and campers	25482.	25471.	12.		2.	10.	0.	0.	10.
3931	Musical instruments	18193.	18193.	0.		0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	2849.	2849.	0.		0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	61908.	61908.	0.		0.	0.	0.	0.	0.
3991	Brooms and brushes	14.	14.	0.		0.	0.	0.	0.	0.
3993	Signs and advertising displays	2063.	1921.	142.		87.	55.	0.	55.	0.
3995	Burial caskets	10670.	10670.	0.		0.	0.	0.	0.	0.
Total, sampled industries		2638622.	2636676.	1947.		155.	1792.	937.	764.	91.
Adjusted total, all industries		2931802.	2929640.	2163.		172.	1991.	1041.	849.	101.

1/ Industry 2451--Mobile homes data not available by use

Table B-21.—Medium-density fiberboard used in selected manufacturing industries in products made for sale and for own use, 1977
(Thousand square feet, 3/4-inch basis)

Industry number	Industry name	Industry total	Products made for sale	Products made for own use		Packaging and shipping			Dunnage, blocking & bracing
				Total, own use	Jigs, models, patterns & flasks	Total	Pallets	Containers	
2429	Special product sawmills, nec	0.	0.	0.	0.	0.	0.	0.	0.
2431	Millwork	33209.	33209.	0.	0.	0.	0.	0.	0.
2434	Wood kitchen cabinets	28115.	28115.	0.	0.	0.	0.	0.	0.
2439	Structural wood members, nec	1546.	1546.	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	1491.	1491.	0.	0.	0.	0.	0.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	1080.	1080.	0.	0.	0.	0.	0.	0.
2451	Mobile homes /1	0.	0.	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	1289.	1289.	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	429.	429.	0.	0.	0.	0.	0.	0.
2511	Wood household furniture	206320.	206320.	0.	0.	0.	0.	0.	0.
2512	Upholstered household furniture	80071.	80071.	0.	0.	0.	0.	0.	0.
2514	Metal household furniture	5850.	5850.	0.	0.	0.	0.	0.	0.
2515	Mattresses and bedsprings	85.	85.	0.	0.	0.	0.	0.	0.
2517	Wood television and radio cabinets	4224.	4224.	0.	0.	0.	0.	0.	0.
2519	Household furniture, nec	0.	0.	0.	0.	0.	0.	0.	0.
2521	Wood office furniture	2208.	2208.	0.	0.	0.	0.	0.	0.
2522	Metal office furniture	137.	137.	0.	0.	0.	0.	0.	0.
2531	Public building and related furniture	5654.	5654.	0.	0.	0.	0.	0.	0.
2541	Wood partitions and fixtures	36543.	36543.	0.	0.	0.	0.	0.	0.
2542	Metal partitions and fixtures	31749.	31749.	0.	0.	0.	0.	0.	0.
2591	Drapery hardware and blinds & shades	0.	0.	0.	0.	0.	0.	0.	0.
2599	Furniture and fixtures, nec	5339.	5339.	0.	0.	0.	0.	0.	0.
2621	Paper mills, except building paper	0.	0.	0.	0.	0.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	0.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	1054.	1054.	0.	0.	0.	0.	0.	0.
3161	Luggage	175.	175.	0.	0.	0.	0.	0.	0.
3211	Flat glass	0.	0.	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	0.	0.	0.	0.	0.	0.
3312	Blast furnaces and steel mills	0.	0.	0.	0.	0.	0.	0.	0.
3351	Copper rolling and drawing	0.	0.	0.	0.	0.	0.	0.	0.
3421	Cutlery	0.	0.	0.	0.	0.	0.	0.	0.
3423	Hand and edge tools, nec	0.	0.	0.	0.	0.	0.	0.	0.
3425	Hand saws and saw blades	0.	0.	0.	0.	0.	0.	0.	0.
3442	Metal doors, sash, and trim	0.	0.	0.	0.	0.	0.	0.	0.
3448	Prefabricated metal buildings	7.	7.	0.	0.	0.	0.	0.	0.
3523	Farm machinery and equipment	0.	0.	0.	0.	0.	0.	0.	0.
3537	Industrial trucks and tractors	0.	0.	0.	0.	0.	0.	0.	0.
3552	Textile machinery	15.	15.	0.	0.	0.	0.	0.	0.
3565	Industrial patterns	0.	0.	0.	0.	0.	0.	0.	0.
3585	Refrigeration and heating equipment	276.	276.	0.	0.	0.	0.	0.	0.
3612	Transformers	0.	0.	0.	0.	0.	0.	0.	0.
3613	Switchgear and switchboard apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3632	Household refrigerators and freezers	0.	0.	0.	0.	0.	0.	0.	0.
3651	Radio and TV communication equipment	5580.	5580.	0.	0.	0.	0.	0.	0.
3661	Telephone and telegraph apparatus	0.	0.	0.	0.	0.	0.	0.	0.
3713	Truck and bus bodies	30.	30.	0.	0.	0.	0.	0.	0.
3714	Motor vehicle parts and accessories	0.	0.	0.	0.	0.	0.	0.	0.
3715	Truck trailers	0.	0.	0.	0.	0.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	0.	0.	0.	0.	0.	0.	0.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	0.	0.	0.
3731	Ship building and repairing	0.	0.	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	33.	33.	0.	0.	0.	0.	0.	0.
3792	Travel trailers and campers	587.	587.	0.	0.	0.	0.	0.	0.
3931	Musical instruments	0.	0.	0.	0.	0.	0.	0.	0.
3944	Games, toys, and children's vehicles	27.	27.	0.	0.	0.	0.	0.	0.
3949	Sporting and athletic goods, nec	2268.	2268.	0.	0.	0.	0.	0.	0.
3991	Brooms and brushes	0.	0.	0.	0.	0.	0.	0.	0.
3993	Signs and advertising displays	1780.	1780.	0.	0.	0.	0.	0.	0.
3995	Burial caskets	0.	0.	0.	0.	0.	0.	0.	0.
Total, sampled industries		457171.	457171.	0.	0.	0.	0.	0.	0.
Adjusted total, all industries		507968.	507968.	0.	0.	0.	0.	0.	0.

1/ Industry 2451--Mobile homes data not available by use

Table B-22.—Purchases of processed wood products, by industry and type
(Thousand dollars)

Industry number	Industry name	Purchase code /1							
		1	2	3	4	5	6	7	8
2429	Special product sawmills, nec	0.	338.	0.	0.	0.	0.	0.	0.
2431	Millwork	7248.	149940.	124655.	0.	17564.	41524.	13511.	5543.
2434	Wood kitchen cabinets	18963.	4595.	8752.	74.	1596.	13504.	1816.	13787.
2439	Structural wood members, nec	11797.	68163.	0.	0.	0.	22.	0.	0.
2441	Nailed wood boxes and shooks	2285.	1647.	0.	0.	66.	1857.	13.	161.
2448	Wood pallets and skids	63101.	12742.	0.	0.	0.	418.	312.	0.
2449	Wood containers, nec	6691.	908.	0.	26.	4873.	529.	14.	0.
2451	Mobile homes /2								
2452	Prefabricated wood buildings	28.	1395.	0.	0.	0.	0.	0.	37349.
2499	Wood products, nec	46037.	94849.	6827.	120.	2218.	10125.	947.	105.
2511	Wood household furniture	98308.	26683.	39916.	179.	12201.	39764.	12489.	29751.
2512	Upholstered household furniture	19647.	2177.	7966.	46712.	693.	2301.	613.	2968.
2514	Metal household furniture	3903.	75.	208.	8258.	0.	27.	3920.	3455.
2515	Mattresses and bedsprings	2539.	8793.	4366.	8621.	0.	515.	0.	293.
2517	Wood television and radio cabinets	4306.	461.	0.	0.	11350.	6247.	419.	1936.
2519	Household furniture, nec	0.	71.	237.	1093.	0.	84.	3.	1109.
2521	Wood office furniture	4128.	12.	184.	3067.	3241.	5145.	230.	1688.
2522	Metal office furniture	231.	84.	1743.	2392.	1463.	7736.	58.	1223.
2531	Public building and related furniture	6913.	2622.	1304.	4881.	3425.	4186.	810.	1366.
2541	Wood partitions and fixtures	1569.	11790.	2134.	0.	730.	1375.	2664.	3715.
2542	Metal partitions and fixtures	991.	60.	1668.	483.	402.	725.	2543.	1124.
2591	Drapery hardware and blinds & shades	348.	816.	8668.	0.	953.	0.	0.	399.
2599	Furniture and fixtures, nec	999.	783.	7762.	977.	12.	757.	151.	637.
2621	Paper mills, except building paper	77.	1109.	0.	0.	0.	84.	1.	0.
2641	Paper coating and glazing	0.	175.	13.	0.	0.	0.	0.	0.
3131	Boot and shoe findings	0.	2.	28.	0.	0.	0.	0.	0.
3161	Luggage	304.	152.	0.	0.	527.	1514.	18.	0.
3211	Flat glass	0.	581.	0.	0.	0.	0.	0.	0.
3251	Brick and structural clay tile	55.	0.	0.	0.	739.	0.	0.	0.
3312	Blast furnaces and steel mills	7386.	6832.	2043.	0.	0.	170.	169.	0.
3351	Copper rolling and drawing	0.	21.	0.	0.	0.	0.	0.	0.
3421	Cutlery	266.	198.	7579.	0.	34.	0.	0.	0.
3423	Hand and edge tools, nec	848.	80.	11449.	0.	3.	0.	0.	0.
3425	Hand saws and saw blades	239.	2.	94.	0.	0.	44.	0.	0.
3442	Metal doors, sash, and trim	53.	4928.	995.	0.	0.	0.	0.	82.
3448	Prefabricated metal buildings	937.	2872.	0.	0.	0.	966.	0.	158.
3523	Farm machinery and equipment	171.	2096.	1.	0.	0.	895.	0.	0.
3537	Industrial trucks and tractors	304.	45.	0.	0.	0.	1.	0.	0.
3552	Textile machinery	972.	118.	24.	0.	3.	15.	0.	0.
3565	Industrial patterns	143.	196.	0.	0.	0.	7.	0.	0.
3585	Refrigeration and heating equipment	776.	375.	1228.	0.	0.	310.	547.	118.
3612	Transformers	857.	2081.	0.	0.	0.	37.	407.	0.
3613	Switchgear and switchboard apparatus	18.	831.	79.	26.	4.	136.	4.	0.
3632	Household refrigerators and freezers	126.	147.	0.	0.	0.	0.	0.	0.
3651	Radio and .V communication equipment	1988.	2211.	1426.	16.	33099.	40.	663.	34483.
3661	Telephone and telegraph apparatus	0.	13.	0.	16.	0.	0.	0.	0.
3713	Truck and bus bodies	2035.	1014.	4112.	0.	0.	1553.	0.	3.
3714	Motor vehicle parts and accessories	3881.	300.	73.	0.	0.	268.	2.	0.
3715	Truck trailers	9374.	3873.	10028.	0.	1275.	6825.	33.	0.
3724	Aircraft engines and engine parts	320.	152.	0.	0.	0.	136.	0.	1.
3728	Aircraft equipment, nec	0.	0.	0.	0.	0.	7.	0.	0.
3731	Ship building and repairing	0.	241.	0.	0.	0.	0.	0.	0.
3732	Boat building and repairing	2976.	5368.	570.	0.	0.	4688.	120.	0.
3792	Travel trailers and campers	183.	6511.	1065.	0.	3832.	2459.	6.	1742.
3931	Musical instruments	38153.	2240.	3331.	7146.	18298.	13435.	304.	5503.
3944	Games, toys, and children's vehicles	6642.	1499.	927.	0.	0.	1851.	1160.	3264.
3949	Sporting and athletic goods, nec	8613.	1780.	2526.	0.	1004.	598.	749.	1278.
3991	Brooms and brushes	6946.	421.	25224.	0.	0.	73.	0.	6.
3993	Signs and advertising displays	413.	877.	78.	0.	6.	548.	487.	153.
3995	Burial caskets	1148.	1820.	2923.	0.	0.	126.	8.	681.
Total, sampled industries /3		396236.	440165.	292206.	84087.	119611.	173627.	45191.	154081.

- 1/ Product codes: 1--Hardwood dimension
2--Softwood cut stock
3--Hardwood and softwood semi-and fully fabricated parts
4--Furniture frames
5--Veneer cut-to-size and parts
6--Plywood cut-to-size and parts
7--Hardboard cut-to-size and parts
8--Particleboard cut-to-size and parts
9--Composite panels
10--Boxes and crates-nailed wood or panel
11--Boxes and crates-wirebound
12--Pallets and pallet containers
13--Veneer containers other than boxes or crates
14--Cooperage, tight and slack
15--Jigs, models, patterns, and flasks
2/ Industry 2451--Mobile home purchases not available
3/ Excludes industry 2451--Mobile homes

Table B-22.—Purchases of wood products, by industry and type—continued
(Thousand dollars)

Industry number	Industry name	Purchase code 1						
		9	10	11	12	13	14	15
2429	Special product sawmills, nec	0.	0.	0.	441.	103.	334.	0.
2431	Millwork	2257.	174.	0.	438.	0.	0.	0.
2434	Wood kitchen cabinets	2292.	0.	0.	107.	0.	0.	0.
2439	Structural wood members, nec	0.	0.	0.	0.	0.	0.	0.
2441	Nailed wood boxes and shooks	0.	0.	0.	182.	0.	0.	0.
2448	Wood pallets and skids	0.	0.	0.	0.	0.	0.	0.
2449	Wood containers, nec	0.	0.	0.	2965.	0.	0.	0.
2451	Mobile homes /2	0.	0.	0.	0.	0.	0.	0.
2452	Prefabricated wood buildings	222.	0.	0.	0.	0.	0.	0.
2499	Wood products, nec	1083.	15.	0.	1924.	0.	0.	41.
2511	Wood household furniture	31720.	141.	0.	833.	0.	0.	66.
2512	Upholstered household furniture	14664.	189.	0.	11.	0.	0.	0.
2514	Metal household furniture	19.	0.	0.	253.	0.	0.	4.
2515	Mattresses and bedsprings	392.	176.	0.	48.	0.	0.	0.
2517	Wood television and radio cabinets	1710.	0.	0.	107.	0.	0.	21.
2519	Household furniture, nec	0.	0.	0.	50.	0.	0.	0.
2521	Wood office furniture	468.	17.	0.	0.	0.	0.	1.
2522	Metal office furniture	164.	379.	108.	391.	0.	0.	0.
2531	Public building and related furniture	102.	0.	2.	55.	0.	0.	0.
2541	Wood partitions and fixtures	2373.	0.	0.	128.	0.	1.	0.
2542	Metal partitions and fixtures	331.	32.	1659.	3282.	0.	0.	4.
2591	Drapery hardware and blinds & shades	154.	1.	0.	135.	0.	0.	0.
2599	Furniture and fixtures, nec	461.	295.	0.	65.	0.	0.	211.
2621	Paper mills, except building paper	0.	0.	0.	5490.	0.	0.	0.
2641	Paper coating and glazing	0.	0.	142.	4310.	0.	0.	0.
3131	Boot and shoe findings	0.	0.	0.	19.	0.	0.	0.
3161	Luggage	0.	1235.	0.	33.	0.	0.	0.
3211	Flat glass	0.	61131.	55.	0.	0.	0.	0.
3251	Brick and structural clay tile	0.	0.	4.	213.	0.	0.	0.
3312	Blast furnaces and steel mills	0.	1714.	41.	5030.	0.	485.	0.
3351	Copper rolling and drawing	0.	539.	282.	89.	0.	0.	0.
3421	Cutlery	1334.	1.	0.	20.	0.	0.	0.
3423	Hand and edge tools, nec	0.	416.	146.	619.	0.	0.	0.
3425	Hand saws and saw blades	0.	274.	3.	119.	0.	0.	0.
3442	Metal doors, sash, and trim	910.	556.	99.	556.	45.	0.	0.
3448	Prefabricated metal buildings	1233.	4.	0.	146.	0.	0.	0.
3523	Farm machinery and equipment	0.	879.	236.	3035.	0.	0.	93.
3537	Industrial trucks and tractors	0.	7.	0.	372.	0.	0.	0.
3552	Textile machinery	0.	8.	22.	8.	0.	0.	3.
3565	Industrial patterns	0.	0.	0.	1.	0.	0.	1983.
3585	Refrigeration and heating equipment	0.	4647.	139.	18597.	20.	228.	19.
3612	Transformers	7.	336.	161.	740.	0.	0.	6.
3613	Switchgear and switchboard apparatus	0.	63.	159.	2667.	0.	0.	57.
3632	Household refrigerators and freezers	0.	0.	0.	95.	0.	0.	0.
3651	Radio and TV communication equipment	13222.	0.	0.	1339.	0.	0.	0.
3661	Telephone and telegraph apparatus	563.	1198.	0.	635.	0.	0.	0.
3713	Truck and bus bodies	6660.	136.	188.	18.	0.	0.	2.
3714	Motor vehicle parts and accessories	0.	3532.	2029.	23644.	12.	0.	27.
3715	Truck trailers	413.	8.	9.	7.	0.	0.	0.
3724	Aircraft engines and engine parts	0.	2154.	0.	431.	0.	0.	12.
3728	Aircraft equipment, nec	0.	244.	4.	8984.	0.	0.	7.
3731	Ship building and repairing	18.	72.	28.	248.	0.	0.	27.
3732	Boat building and repairing	548.	0.	0.	0.	0.	0.	26.
3792	Travel trailers and campers	689.	1.	0.	11.	0.	0.	1.
3931	Musical instruments	0.	43.	0.	323.	0.	0.	0.
3944	Games, toys, and children's vehicles	114.	0.	0.	99.	0.	0.	0.
3949	Sporting and athletic goods, nec	35.	19.	28.	181.	0.	0.	4.
3991	Brooms and brushes	0.	11.	18.	55.	0.	0.	0.
3993	Signs and advertising displays	1398.	636.	0.	39.	0.	0.	534.
3995	Burial caskets	0.	282.	17.	0.	0.	0.	0.
Total, sampled industries /3		85546.	81565.	5579.	89484.	193.	1048.	3201.

- 1/ Product codes: 1--Hardwood dimension
2--Softwood cut stock
3--Hardwood and softwood semi-and fully fabricated parts
4--Furniture frames
5--Veneer cut-to-size and parts
6--Plywood cut-to-size and parts
7--Hardboard cut-to-size and parts
8--Particleboard cut-to-size and parts
9--Composite panels
10--Boxes and crates-nailed wood or panel
11--Boxes and crates-wirebound
12--Pallets and pallet containers
13--Veneer containers other than boxes or crates
14--Cooperage, tight and slack
15--Jigs, models, patterns, and flasks
- 2/ Industry 2451--Mobile home purchases not available
- 3/ Excludes Industry 2451--Mobile homes

Table B-23.—Purchases of processed wood products, by industry, 1977
(Thousand dollars)

Industry number	Industry name	Parts & products /1	Packaging & shipping /2	Total
2429	Special product sawmills, nec	338.	878.	1216.
2431	Millwork	362272.	612.	362884.
2434	Wood kitchen cabinets	65384.	107.	65491.
2439	Structural wood members, nec	79982.	0.	79982.
2441	Nailed wood boxes and shook	6029.	182.	6211.
2448	Wood pallets and skids	76573.	0.	76573.
2449	Wood containers, nec	13041.	2965.	16006.
2451	Mobile homes /3	-----	-----	-----
2452	Prefabricated wood buildings	38994.	0.	38994.
2499	Wood products, nec	162352.	1839.	164191.
2511	Wood household furniture	291077.	974.	292051.
2512	Upholstered household furniture	97741.	200.	97941.
2514	Metal household furniture	19869.	253.	20122.
2515	Mattresses and bedsprings	25519.	224.	25743.
2517	Wood television and radio cabinets	26450.	107.	26557.
2519	Household furniture, nec	2597.	50.	2647.
2521	Wood office furniture	18164.	17.	18181.
2522	Metal office furniture	15094.	878.	15972.
2531	Public building and related furniture	25609.	57.	25666.
2541	Wood partitions and fixtures	26350.	129.	26479.
2542	Metal partitions and fixtures	8331.	4973.	13304.
2591	Drapery hardware and blinds & shades	11338.	136.	11474.
2599	Furniture and fixtures, nec	12750.	360.	13110.
2621	Paper mills, except building paper	1271.	5490.	6761.
2641	Paper coating and glazing	188.	4452.	4640.
3131	Boot and shoe findings	30.	19.	49.
3161	Luggage	2515.	1268.	3783.
3211	Flat glass	581.	61186.	61767.
3251	Brick and structural clay tile	794.	217.	1011.
3312	Blast furnaces and steel mills	16600.	7270.	23870.
3351	Copper rolling and drawing	21.	910.	931.
3421	Cutlery	9411.	21.	9432.
3423	Hand and edge tools, nec	12380.	1181.	13561.
3425	Hand saws and saw blades	379.	396.	775.
3442	Metal doors, sash, and trim	6968.	1256.	8224.
3448	Prefabricated metal buildings	6190.	150.	6340.
3523	Farm machinery and equipment	3256.	4150.	7406.
3537	Industrial trucks and tractors	350.	379.	729.
3552	Textile machinery	1135.	38.	1173.
3565	Industrial patterns	2329.	1.	2330.
3585	Refrigeration and heating equipment	3364.	23631.	26995.
3612	Transformers	3395.	1237.	4632.
3613	Switchgear and switchboard apparatus	1155.	2889.	4044.
3632	Household refrigerators and freezers	273.	95.	368.
3651	Radio and TV communication equipment	87148.	1339.	88487.
3661	Telephone and telegraph apparatus	592.	1833.	2425.
3713	Truck and bus bodies	15379.	342.	15721.
3714	Motor vehicle parts and accessories	4551.	29217.	33768.
3715	Truck trailers	31821.	24.	31845.
3724	Aircraft engines and engine parts	621.	2585.	3206.
3728	Aircraft equipment, nec	14.	9232.	9246.
3731	Ship building and repairing	286.	348.	634.
3732	Boat building and repairing	14296.	0.	14296.
3792	Travel trailers and campers	16488.	12.	16500.
3931	Musical instruments	88410.	366.	88776.
3944	Games, toys, and children's vehicles	15457.	99.	15556.
3949	Sporting and athletic goods, nec	16587.	228.	16815.
3991	Brooms and brushes	32670.	84.	32754.
3993	Signs and advertising displays	4484.	675.	5159.
3995	Burial caskets	6708.	299.	7007.
Total, sampled industries /4		1793951.	177860.	1971811.

1/ Includes product codes 1-9 and 15 (see footnote 1, Table B-22.)

2/ Includes product codes 10-14 (see footnote 1, Table B-22.)

3/ Industry 2451--Mobile home purchases not available

4/ Excludes industry 2451--Mobile homes

Appendix C— Past "Wood Used in Manufacturing" Studies

The lumber-used-in-manufacture surveys of 1928, 1933, and 1940 were primarily product oriented, reporting the quantities of lumber, plywood and veneer, and logs and bolts used to produce a defined set of products. The 1928 survey (9) was conducted by mail and was essentially a 100 percent canvass of all manufacturing firms that were believed to have used wood as a component in their final product and had an annual production valued at \$5,000 or more. Completed questionnaires were received from approximately 72 percent of the wood-using firms canvassed. Of these, some 12,386 returns were usable. Results were stratified by final product type, state, species, and form of wood (lumber, plywood and veneer, and logs and bolts) consumed. Some 60 final products were included, and 70 species of both native and foreign woods identified.

The second survey of lumber used in manufacture was conducted in 1933 (10) and followed the same general approach as the 1928 survey in that it was a complete canvass of all known wood-using manufacturing firms that used wood in their final product and had production valued at \$5,000 or more. One significant change was made, however. The 1933 study included some industries that consumed large quantities of lumber and other wood products for boxing and crating and other establishment uses, but whose finished product contained no wood. Results of this study were stratified by product, state, species, and form of wood.

The 1940 survey of lumber used in manufacture was nearly identical in design to the 1933 study except for a few minor changes in product groupings (6). Nearly a complete canvass of the 19,000 wood-using manufacturing firms in existence at that time plus an additional 8,000 firms that used wood for patterns and packaging was made. As in 1933, results were stratified by product, state, species, and form of wood.

In 1948, several major changes were made in the survey, including a name change to "wood used in manufacture" (7). First, all known wood-using manufacturing plants were surveyed, including establishments having one or more employees. Previous surveys included only those firms of a predetermined size (usually in terms of total value of products shipped). The inclusion of the small firms resulted in an increase in the number of firms canvassed from 27,000 in 1940 to 92,000 in 1948. Secondly, quantities of wood used for shipping (dunnage, blocking, and bracing) were requested but tabulated separately from the other wood-use data. Finally, the results, as well as being stratified by type of product, were also stratified by industry for the first time. Manufacturing plants were classified into industry groups according to the principal product manufactured. The industry classification used is found in

the 1945 Standard Industrial Classification Manual. Although used only as a secondary stratification in 1948, industry stratification provided the framework for more recent wood-used-in-manufacturing studies conducted by the Forest Service.

The 1960 survey of wood used in manufacture was expanded to include hardboard and particleboard, as well as lumber, plywood and veneer, and logs and bolts (3). The survey included wood used in products made for sale, for pallets, containers, skids, jigs, models, patterns, and flasks made and used in the same establishment, and for dunnage, blocking, and bracing used for shipping. The 1960 study differed from previous studies in that it was a sample survey of all manufacturing industries. Earlier studies were 100 percent canvasses of selected wood-using industries. This resulted in a reduction in the number of firms contacted from 92,000 in 1948 to 42,155 in 1960. Also, the 1960 survey was industry oriented. Previous surveys were primarily product oriented.

In 1965, 127 industries instead of the 425 manufacturing industries as defined in the 1957 Standard Industrial Classification Manual were sampled (4). These 127 industries were estimated to use 95 percent of all wood utilized in manufacturing. A sample of 20,488 of the 60,122 establishments in these 127 industries was made. Results were stratified by industry, species, end use, form of wood, and product.

Table C-1 summarizes total lumber and other wood products use reported in all the wood-used-in-manufacturing surveys conducted by the Forest Service.

Table C-1.—Lumber and wood products used in manufacturing, selected years, 1928-1977

Form of wood and unit of measure	1928¹	1933²	1940³	1948⁴	1960⁵	1965⁶	1977
Lumber (million fbm) ⁷	12,726	5,468	10,924	12,823	11,743	14,285	16,408
Bolts (million fbm) ⁷	599	451	628	411	771	1,242	916
Plywood and veneer (million ft ² , 1-in. basis)	406	193	453	1,131	1,484	1,165	1,525
(million ft ² , 3/8-in. basis)	1,084	515	1,208	3,015	3,957	3,107	4,067
Hardboard (million ft ² , 1-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	152	220	262
(million ft ² , 1/8-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	1,218	1,764	2,093
Insulation board (million ft ² , 1-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	120	367
(million ft ² , 1/2-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	241	734
Particleboard (million ft ² , 1-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	106	428	2,199
(million ft ² , 3/4-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	141	570	2,932
Medium density fiberboard (million ft ² , 1-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	381
(million ft ² , 3/4-in. basis)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	508
Total, all products (million ft ² , 1-in. basis)	13,731	6,112	12,005	14,365	14,256	17,460	22,058

¹ Ref. (9). The 1928 data do not include wood used in packaging or in jigs, models, patterns, and flasks made and used by the nonwood-using industries and are thus not strictly comparable with data for later years.

² Ref. (10).

³ Ref. (6).

⁴ Ref. (7). 1948 and subsequent years include wood used for dunnage, blocking, and bracing and are thus not strictly comparable with previous survey years.

⁵ Ref. (3).

⁶ Ref. (4).

⁷ fbm = ft², 1-in. basis.

⁸ Not included in survey.

Appendix D— Changes in the Standard Industrial Classification System in 1972

Table D-1.—Changes in the Standard Industrial Classification System in 1972¹

SIC No.	Industry	Changes
2426	Hardwood dimension and flooring	Includes wood frames for household furniture which previously were classified in 2512, upholstered household furniture.
2431	Millwork	Excludes custom cabinetwork to be built in which is now classified in 2434, wood kitchen cabinets.
2434	Wood kitchen cabinets	New industry formed by combining custom cabinetwork to be built in from 2431 and wood kitchen cabinets from 2511, wood household furniture.
2439	Structural wood members, NEC ²	New industry formed from selected products in 2433, prefabricated wood structures.
2433	Prefabricated wood structures	Divided into 2439, structural wood members, NEC and 2450, prefabricated wood buildings.
2448	Wood pallets and skids	New industry formed from selected products from 2499, wood products, NEC.
2449	Wood containers, NEC	New industry formed by combining old industries 2443, wood crates and boxes and related, 2443, veneer and plywood containers, and 2445, cooperage.
2492	Particleboard	New industry formed from selected products from 2499, wood products, NEC.
2499	Wood products, NEC	Excludes wood pallets and skids which are now in 2448 and particleboard which is in 2492.
2451	Mobile homes	New industry formed from selected products from 3791, trailer coaches.
2452	Prefabricated wood buildings	New industry formed from selected products from 2433, prefabricated wood structures.
2511	Wood household furniture, except upholstered	Excludes kitchen cabinets which are not classified in 2434, wood kitchen cabinets, and wood television, radio, phonograph, and sewing machine cabinets which are now classified in 2517, wood T.V. and radio cabinets.
2512	Upholstered household furniture	Excludes wood furniture frames which are now classified in 2426, hardwood dimension and flooring.
2517	Wood T.V. and radio cabinets	New industry formed from selected products from 2511, wood household furniture.
3792	Travel trailers and campers	New industry formed from selected products from 3791, trailer coaches and from 3799, transportation equipment, NEC.

¹ Ref. (12).

² Not elsewhere classified.

Appendix E— Definition of Industries Included in Survey

Table E-1.—Standard industrial classification system definitions of industries included in the 1977 Wood Used in Manufacturing Survey

SIC No.	Industry	Definition
2429	Special product sawmills, NEC	Mills primarily engaged in manufacturing excelsior, wood shavings, and other wood products and in sawing special products, NEC.
2431	Millwork	Establishments primarily engaged in manufacturing fabricated millwork. Establishments primarily engaged in producing millwork are included in this industry. Establishments primarily producing standard workings or patterns of lumber are classified in 2434. Establishments primarily manufacturing wood kitchen cabinets and bathroom vanities are classified in 2434.
2434	Wood kitchen cabinets	Establishments primarily engaged in manufacturing wood kitchen cabinets and bathroom vanities.
2439	Structural wood members, NEC	Establishments primarily engaged in producing laminated or fabricated trusses, joists, and other structural members of lumber. Establishments primarily engaged in fabricating on the site of construction are classified in Division C, Construction. Establishments primarily engaged in producing prefabricated wooden buildings, sections, and panels are classified in 2452.
2441	Nailed and lock corner wood boxes and skook	Establishments primarily engaged in manufacturing nailed and lock corner wood boxes (lumber or plywood), and which also may produce skook for nailed and lock corner boxes.
2448	Wood pallets and skids	Establishments primarily engaged in manufacturing wood and wood metal composite pallets and skids.
2449	Wood containers, NEC	Establishments primarily engaged in manufacturing wood containers, NEC, such as cooperage, wire-bound boxes and crates, and other veneer and plywood containers. Establishments primarily engaged in manufacturing tobacco hopper bins are classified in 2421, and those manufacturing cooperage stock in 2429.
2451	Mobile homes	Establishments primarily engaged in manufacturing mobile homes. These mobile homes are generally over 35 feet long, at least 8 feet wide, do not have facilities for disposal of water or waste, and are equipped with wheels. The products may also have nonresidential uses, such as classrooms or offices. Trailers that are generally 35 feet long or less, 8 feet wide or less and with self-contained facilities are classified in 2452. Portable buildings not equipped with wheels are classified in 2452.
2452	Prefabricated wood buildings and components	Establishments primarily engaged in manufacturing prefabricated wood buildings, sections, and panels. Establishments primarily engaged in fabricating buildings on the site of construction are classified in Division C, Construction.
2499	Wood Products, NEC	Establishments primarily engaged in turning and shaping wood and manufacturing miscellaneous wood products, NEC, from rattan, reed, splint, straw, veneer, paper, strips, wicker, and willow. This industry also includes establishments manufacturing cork and related products, cork products, hardboard, and wood or metal, rattan and paper frames. Establishments primarily engaged in manufacturing pallets and skids are classified in 2448.
2511	Wood household furniture, except upholstered	Establishments primarily engaged in manufacturing wood household furniture commonly used in dwellings. This industry also includes establishments manufacturing cane furniture. Establishments primarily engaged in manufacturing upholstered furniture are classified in 2512, and reed and rattan furniture in 2519, television and radio cabinets and sewing machine cabinets in 2517, and kitchen cabinets and bathroom vanities in 2434.
2512	Wood household furniture, upholstered	Establishments primarily engaged in manufacturing upholstered furniture, including frames. Shops primarily engaged in reupholstering furniture, except when they are engaged in manufacturing dual purpose sleep furniture, such as sofas, chairs, and beds, are classified in nonmanufacturing industries. Establishments primarily engaged in manufacturing dual purpose sleep furniture, such as sofas, chairs, and beds, are classified in 2515, regardless of the material used in the frame. Establishments primarily engaged in manufacturing wood frames for upholstered furniture are classified in 2426.
2514	Metal household furniture	Establishments primarily engaged in manufacturing painted or polished metal household furniture of a type commonly used in dwellings. Establishments primarily engaged in manufacturing dual purpose sleep furniture, such as sofas, chairs, and beds, are classified in 2515, regardless of the material used in the frame.

Table E-1.—Standard industrial classification system definitions of industries included in the 1977 Wood Used in Manufacturing Survey—cont.

SIC No.	Industry	Definition
2515	Mattresses and bedsprings	Establishments primarily engaged in manufacturing inner spring mattresses, box spring mattresses and noninner-spring mattresses containing felt, foam, rubber, urethane, hair, or any other filling material, and assembled wire springs (fabric tops) or boxes for use on beds, couches, and cots. This industry also includes establishments primarily engaged in manufacturing dual purpose sleep furniture, such as cots, couches, sofa beds, and chair beds, regardless of the material used in the frame. Establishments primarily engaged in manufacturing automobile seats and backs are classified in 2531, individual wire springs in 3495, and padding and upholstery lining in 2293.
2517	Wood television, radio, phonograph, and sewing machine cabinets	Establishments primarily engaged in manufacturing wood cabinets for radios, televisions, sets, phonographs, and sewing machines.
2519	Household furniture, NEC	Establishments primarily engaged in manufacturing reed, rattan, and other wicker furniture, plastics and fiberglass household furniture and cabinets, and household furniture, NEC.
2521	Wood office furniture	Establishments primarily engaged in manufacturing wood office furniture, whether padded, upholstered, or plain.
2522	Metal office furniture	Establishments primarily engaged in manufacturing metal office furniture, whether padded or plain. Establishments primarily engaged in manufacturing safes and vaults are classified in 3499.
2531	Public building and related furniture	Establishments primarily engaged in manufacturing furniture for schools, theaters, assembly halls, churches, and libraries. Establishments primarily engaged in manufacturing seats for public conveyances, as well as seats for automobiles and aircraft, are included in this industry. Establishments primarily engaged in manufacturing stone furniture are classified in 3281, and concrete furniture in 3272.
2541	Wood partitions, shelving, lockers, and office and store fixtures	Establishments primarily engaged in manufacturing wood shelving, lockers, office and store fixtures, prefabricated partitions, plastic laminated fixture tops, and related fabricated products. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases are classified in 3585, and safes and vaults in 3499.
2542	Metal partitions, shelving, lockers, and office and store fixtures	Establishments primarily engaged in manufacturing metal shelving, storage racks, lockers, office and store fixtures, prefabricated partitions, and related fabricated products. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases are classified in 3585, and safes and vaults in 3499.
2591	Drapery hardware and window blinds and shades	Establishments primarily engaged in manufacturing curtain and drapery rods, poles, and fixtures, and venetian blinds and other window blinds and shades, regardless of the materials used, except canvas shades and awnings (2394).
2599	Furniture and fixtures, NEC	Establishments primarily engaged in manufacturing furniture and fixtures, NEC, including furniture specially designed for use in restaurants, bars, cafeterias, bowling establishments, and ships.
2621	Paper mills, except building paper mills	Establishments primarily engaged in manufacturing paper (except building paper) from wood pulp and other fibers, and which may also manufacture converted paper products. Pulp mills combined with paper mills, and not separately reported, are included in this industry, where separately reported, they are classified in 2611.
2641	Paper coating and glazing	Establishments primarily engaged in manufacturing coated, glazed, or laminated paper from purchased paper stock. Also included are establishments primarily engaged in pressure sensitive tape with backing of any material other than rubber. Establishments primarily engaged in manufacturing carbon paper are classified in 3881, and blueprint and blueprint paper in 3861.
3131	Boot and shoe cut stock and findings	Establishments primarily engaged in manufacturing pigskin, calfskin, and other leather boot and shoe cut stock and findings. This industry also includes establishments primarily engaged in manufacturing heels, rolling tapes, and other findings of rubber, composition, plastics, and fiber are classified in Major Group 38 and other miscellaneous plastic products.
3161	Luggage	Establishments primarily engaged in manufacturing luggage of leather or other materials.
3211	Flat glass	Establishments primarily engaged in manufacturing flat glass. This industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are classified in 3231.
3251	Brick and structural clay tile	Establishments primarily engaged in manufacturing brick and structural clay tile. Establishments primarily engaged in manufacturing clay firebrick are classified in 3295, nonclay firebrick in 3297, sand lime brick in 3299, and pressed brick in 3299.

Table E-1.—Standard industrial classification system definitions of industries included in the 1977 Wood Used in Manufacturing Survey—cont.

SIC No.	Industry	Definition
3312	Blast furnaces (including coke ovens), steel works, and rolling mills	Establishments primarily engaged in manufacturing hot metal, pig iron, silvery pig iron, and ferroalloys from iron ore and iron and steel scrap; converting pig iron, scrap iron and scrap steel into steel, and in hot rolling iron and steel into basic shapes such as plates, sheets, strips, rods, bars, and tubing. Merchant blast furnaces and byproduct or beehive coke ovens are also included in this industry. Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes are classified in 3313.
3351	Rolling, drawing, and extruding of copper	Establishments primarily engaged in rolling, drawing, and extruding copper, brass, bronze, and other copper base alloy basic shapes such as plate, sheet, strip, bar, and tubing. Establishments primarily engaged in recovering copper and its alloys from scrap or dross are classified in 3341.
3421	Cutlery	Establishments primarily engaged in manufacturing cutlery. Establishments primarily engaged in manufacturing table cutlery made entirely of metal are classified in 3914; those manufacturing electric razors in 3634; and those manufacturing hair clippers for human use in 3999, and for animal use in 3523.
3423	Hand and edge tools, except machine tools and hand saws	Establishments primarily engaged in manufacturing files and other hand and tools for metalworking, woodworking, and general maintenance. Establishments primarily engaged in manufacturing saws are classified in 3425, and metal cutting dies, power driven hand tools, and attachments and accessories for machine tools in Major Group 35 (machinery, except electrical).
3425	Hand saws and saw blades	Establishments primarily engaged in manufacturing hand saws and saw blades for hand and power driven saws. Establishments primarily engaged in manufacturing power driven sawing machines are classified in Major Group 35.
3442	Metal doors, sash, frames, molding, and trim	Establishments primarily engaged in manufacturing ferrous and nonferrous metal and metal covered doors and sash, window and door frames and screens, molding, and trim.
3448	Prefabricated metal buildings and components	Establishments primarily engaged in manufacturing prefabricated and portable metal buildings and parts, and prefabricated exterior metal panels.
3523	Farm machinery and equipment	Establishments primarily engaged in manufacturing farm machinery and equipment, including wheel tractors, for use in the preparation and maintenance of the soil, planting and harvesting of the crop, preparing crops for market, on the farm, or for use in performing other farm operations and processes. Establishments primarily engaged in manufacturing industrial trucks, tractors, and trailers used for handling materials in industrial plants, depots, and docks are classified in 3537; contractors' off-highway tractors are classified in 3531; farm hand tools in Group 342; and garden tractors, lawn mowers, and other lawn and garden equipment in 3524.
3537	Industrial trucks, tractors, trailers, and stackers	Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, stackers (truck type), and related equipment, used for handling materials on floors and paved surfaces in and around industrial and commercial plants, depots, docks, and terminals. Establishments primarily engaged in manufacturing motor vehicles and motor vehicle-type trailers are classified in Group 371 (motor vehicle and motor vehicle equipment); farm-type wheel tractors in 3523; wheel tractor shovel loaders and tracklaying tractors in 3531; and wood pallets and skids in 2448.
3552	Textile machinery	Establishments primarily engaged in manufacturing machinery for the textile industries, including parts, attachments, and accessories. Establishments primarily engaged in manufacturing domestic or industrial sewing machines are classified in 3636.
3565	Industrial patterns	Establishments primarily engaged in manufacturing industrial patterns.
3585	Air conditioning and warm air heating equipment and commercial and industrial refrigeration equipment	Establishments primarily engaged in manufacturing refrigeration equipment and systems and similar equipment for commercial and industrial use; complete air conditioning units for domestic, commercial, and industrial use; and warm air furnaces, except electric. Establishments primarily engaged in manufacturing soda fountains and beer dispensing equipment and humidifiers and dehumidifiers, except for rooms, are also classified in this industry. Establishments primarily engaged in manufacturing household refrigerators and home and farm freezers are classified in 3632; electric air space heaters in 3634; and electric warm air furnaces and other electric comfort heating equipment in 3699.
3612	Power distribution and specialty transformers	Establishments primarily engaged in manufacturing power distribution instrument and specialty transformers. Establishments primarily engaged in manufacturing radio frequency or voice frequency transformers, coils, or chokes are classified in 3677; and resistance welder transformers in 3623.

Table E-1.—Standard industrial classification system definitions of industries included in the 1977 Wood Used in Manufacturing Survey—cont.

SIC No.	Industry	Definition
3613	Switchgear and switchboard apparatus	Establishments primarily engaged in manufacturing switchgear and switchboard apparatus. Important products of this industry include power switches, circuit breakers, power switching equipment, and similar switchgear for general industrial application; switchboards and cubicles, control and metering panels, power fuse mountings, and similar switchboard apparatus and supplies. Establishments primarily engaged in manufacturing industrial controls are classified in 3622, and those manufacturing current-carrying wiring devices in 3643.
3632	Household refrigerators and home and farm freezers	Establishments primarily engaged in manufacturing household refrigerators and home and farm freezers. Establishments primarily engaged in manufacturing commercial and industrial refrigeration equipment, packaged room coolers, and air refrigeration compressor and condenser units are classified in 3585, and room dehumidifiers are classified in 3634.
3651	Radio and television receiving sets, except communication types	Establishments primarily engaged in manufacturing electronic equipment for home entertainment, including auto radios and tape players. This industry also includes establishments primarily engaged in manufacturing public address systems and music distribution apparatus. Establishments primarily engaged in manufacturing phonograph records and pre-recorded tape are classified in 3652. Establishments primarily engaged in manufacturing separate cabinets for home electronic equipment are classified in Major Group 25 (furniture and fixtures).
3661	Telephone and telegraph apparatus	Establishments primarily engaged in manufacturing wire telephone and telegraph equipment, and parts especially designed for telephone and telegraph use.
3713	Truck and bus bodies	Establishments primarily engaged in manufacturing truck and bus bodies, for sale separately or for assembly on purchased chassis. Establishments primarily engaged in manufacturing complete trucks and buses are classified in 3711, stamped body parts for trucks and buses in 3465, and truck trailers and demountable cargo containers in 3715.
3714	Motor vehicle parts and accessories	Establishments primarily engaged in manufacturing motor vehicle parts and accessories but not engaged in manufacturing complete motor vehicles or passenger car bodies. Establishments primarily engaged in manufacturing or assembling complete automobiles and trucks are classified in 3711, tires and tubes in 3011, automobile glass in Major Group 32 (stone, clay, glass, and concrete products), automobile stampings in 3465, vehicular lighting equipment in 3647, ignition systems in 3694, storage batteries in 3691, and carburetors, pistons, rings, and valves in 3592.
3715	Truck trailers	Establishments primarily engaged in manufacturing truck trailers, truck trailer chassis for sale separately, detachable trailer bodies (cargo containers) for sale separately, and detachable trailer (cargo container) chassis, for sale separately.
3724	Aircraft engines and engine parts	Establishments primarily engaged in manufacturing aircraft engines and engine parts. Research and development on aircraft engines is included in this industry.
3728	Aircraft parts and auxiliary equipment, not elsewhere classified	Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and parts are classified in 3764. Establishments primarily engaged in manufacturing aircraft parts and auxiliary equipment not elsewhere classified. Research and development on aircraft parts is included in this industry. Establishments primarily engaged in manufacturing or assembling complete aircraft are classified in 3721, aircraft engines and parts in 3724, aeronautical instruments in 3811, aeronautical electrical equipment in 3694, and guided missile and space vehicle parts and auxiliary equipment in 3769.
3731	Ship building and repairing	Establishments primarily engaged in building and repairing all types of ships, barges, and lighters, whether propelled by sail or motor power or towed by other craft. This industry also includes the conversion and alteration of ships. Establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, electrical wiring installation, etc., are classified in other industries.
3732	Boat building and repairing	Establishments primarily engaged in building and repairing all types of boats. Establishments primarily engaged in cleaning and storing boats and in the rental of dock space, and yacht clubs are classified in nonmanufacturing industries. Establishments primarily engaged in manufacturing rubber and nonrigid plastic boats are classified in Major Group 30 (rubber and miscellaneous plastic products).
3792	Travel trailers and campers	Establishments primarily engaged in manufacturing travel trailers for attachment to passenger cars or other vehicles, pickup coaches (campers) or cabs (converts) for mounting on pickup trucks and self-contained motor homes. Travel trailers are generally 35 feet long or less, 8 feet wide or less, and have storage facilities for water and waste. Establishments primarily engaged in manufacturing mobile homes are classified in 2451.

Table E-1.—Standard industrial classification system definitions of industries included in the 1977 Wood Used in Manufacturing Survey—cont.

SIC No.	Industry	Definition
3931	Musical instruments	Establishments primarily engaged in manufacturing pianos, with or without player attachments, organs, other musical instruments, and parts and accessories for musical instruments.
3944	Games, toys, and children's vehicles, except dolls and bicycles	Establishments primarily engaged in manufacturing games and game sets for adults and children, and mechanical and nonmechanical toys. Important products of this industry include games such as chess, checkers, dominoes, puzzles, and other indoor games and toys, such as toy furniture, doll carriages and carts, construction sets, mechanical trains, toy guns and air rifles, and other mechanical games and toys, baby carriages and strollers, children's velocipedes and tricycles, coaster wagons, play cars, sleds, and other children's outdoor wheel goods and vehicles, except bicycles (3751). Establishments primarily engaged in manufacturing dolls are classified in 3942, and sporting and athletic goods for children and adults in 3949.
3949	Sporting and athletic goods, NEC	Establishments primarily engaged in manufacturing sporting and athletic goods not elsewhere classified, such as fishing tackle, golf and tennis goods, baseball, football, basketball, and boxing equipment, roller skates and ice skates, gymnasium and playground equipment, billiard and pool tables, and bowling alleys and equipment. Establishments primarily engaged in manufacturing athletic apparel are classified in Major Group 23 (apparel and other finished products made from fabrics and similar materials). Small arms ammunition in 3482 and firearms in 3484.
3991	Brooms and brushes	Establishments primarily engaged in manufacturing household, industrial, and street sweeping brooms, and brushes, such as paintbrushes, toothbrushes, toilet brushes, and household and industrial brushes.
3993	Signs and advertising displays	Establishments primarily engaged in manufacturing electrical, mechanical, or other signs and advertising displays, including neon signs and advertising novelties. Sign painting shops doing business on a custom basis are classified in 7399. Establishments primarily engaged in manufacturing electric signal equipment are classified in 3662, and commercial lighting fixtures in 3646.
3995	Burial Caskets	Establishments primarily engaged in manufacturing burial caskets and cases including shipping cases of wood or other material except concrete. Establishments primarily engaged in producing other goods for use by morticians are classified on the basis of the product, such as burial garments in Major Group 23 (apparel and other finished products made from fabrics and similar materials).

¹ Not elsewhere classified.

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Wood used in U.S. manufacturing industries, 1977. USDA Forest Serv. Resour. Bull. FPL-12. Madison, WI: Forest Products Laboratory: 1983. 56 p.

Estimated quantities of lumber, plywood, veneer, hardboard, insulation board, particleboard, and medium-density fiberboard consumed by all U.S. manufacturers in 1977 are reported. Estimates are based on a questionnaire survey of 59 major wood-using industries. Quantities are reported by industry, type of use, and species group. This report is one in a series of Forest Service reports dating back to 1928 to estimate wood products use in manufacturing.

Keywords: manufacturing, end-use demand, wood-use survey, wood consumption

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